U.S. Coast Guard Marine Board Investigation ICO the sinking of SS El Faro held in Jacksonville, Florida held

22 February 2016

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CAPT Neubauer: Good morning. This hearing will come to order. Today is February 22nd, 2016 and the time is 9:02 a.m. We're continuing at the Prime F. Osborn Convention Center, in Jacksonville, Florida. I am Captain Jason Neubauer, of the United States Coast Guard, Chief of the Coast Guard Office Investigations and analysis, Washington D.C. I'm the Chairman of the Coast Guard Marine Board of Investigation and the presiding officer over these proceedings. The Commandant of the Coast Guard has convened this board under the authority of Title 46, United States Code, Section 6301 and Title 46 Code of Federal Regulations Part IV to investigate the circumstances surrounding the sinking of the SS El Faro with the loss of 33 lives on October 1st, 2015 while transiting East of the Bahamas. I am conducting the investigation under the rules in 46 C.F.R. Part IV. The investigation will determine as closely as possible the factors that contributed to the incident so that proper recommendations for the prevention of similar casualties may be made. Whether there is evidence that any act of misconduct, inattention to duty, negligence or willful violation of the law on the part of any licensed or certificated personnel contributed to the casualty, and whether there is evidence that any Coast Guard personnel or any representative or employee of any other Government agency or any other person cause or contributed to the casualty. I have previously determined that the following organizations or individuals are parties in interest to the investigation. Tote Incorporated, ABS, Herbert Engineering Corporation

which we'll refer to HEC during the hearing, and Mrs. Teresa Davidson as next of kin for Captain Michael Davidson, Master of the SS El Faro. These parties have a direct interest in the investigation and have demonstrated the potential for contributing significantly to the completeness of the investigation or otherwise enhancing the safety of life and property at sea through participation as party in interest. All parties in interest have a statutory right to employ counsel to represent them, to cross-examine witnesses and have witnesses called on their behalf.

I will examine all witnesses at this formal hearing under oath or affirmation and witnesses will be subject to Federal laws and penalties governing false official statements. Witnesses who are not parties in interest may be advised by their counsel concerning their rights. However, such counsel may not examine or cross-examine other witnesses or otherwise participate.

These proceedings are open to the public and to the media. I ask for the cooperation of all persons present to minimize any disruptive influence on the proceedings in general and on the witnesses in particular. Please turn your cell phones or other electronic devices off or to silent or vibrate mode. Please also limit entry and departure during testimony. Flash photography will be permitted during this opening statement and during recess periods. The members of the press are welcome and an area has been set aside for your use during the proceedings. The news media may question witnesses concerning the testimony that they have given after I have released them from these proceedings. I ask that such interviews be conducted outside of this room. Since the date of the casualty the National Transportation Safety Board and Coast Guard have conducted substantial evidence collection activities and some of that

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previously collected evidence will be considered during these hearings. Should any person have or believe that he or she has information not brought forward, but which might be of direct significance, that person is urged to bring that information to my attention by emailing elfaro@uscg.mil. The Coast Guard relies on strong partnerships to execute its missions. And this Marine Board of Investigation is no exception. The National Transportation Safety Board, provided a representative for this hearing. Mr. Tom Roth-Roffy, seated to my left is the Investigator in Charge for the NTSB investigation. Mr. Roth-Roffy, would you like to make a brief statement? Mr. Roth-Roffy: Thank you Captain. Good Morning, I am Tomas Roth-Roffy, Investigator in Charge for the National Transportation Safety Board's investigation of this accident. The NTSB has joined this hearing to avoid duplicating the development of facts. Nevertheless, I do wish to point out that this does not preclude the NTSB from developing additional information separately from this proceeding if that becomes necessary. At the conclusion of these hearings the NTSB will analyze the facts of the accident. Issue a separate report of the NTSB's findings and recommendations to correct safety problems discovered during the investigation. Thank you. **CAPT Neubauer:** Thank you. We will now call our first witness. Captain John Mauger, Commanding Officer, of the Coast Guard's Marine Safety Center. Please come forward to the witness table and Lieutenant Commander Yemma will administer your oath and ask you some preliminary questions. LCDR Yemma: Captain, would you please raise your right hand. A false statement given to an agency of the United States is punishable by a fine and or imprisonment under 18 United States Code section 1001 and might also subject you to discipline

Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

- 1 under the uniform code of military justice, knowing this do you solemnly swear that the
- testimony you're about to give will be the truth, the whole truth and nothing but the truth,
- 3 so help you God?
- 4 **WIT:** I do.
- 5 **LCDR Yemma:** Thank you, sir. Please be seated. And Captain, our microphones here
- we need to you speak closely in the microphone so we can pick it up.
- 7 **WIT:** Okay, thank you.
- 8 **LCDR Yemma:** Can we please start by stating your full name and spelling your last
- 9 name for the record?
- 10 **WIT:** It's Captain John Warner Mauger, M-A-U-G-E-R. And I'm the Commanding
- Officer of the Coast Guard's Marine Safety Center.
- 12 **LCDR Yemma:** And counsel can you also state your name and spell your last for the
- record?
- 14 **Counsel:** Lieutenant Jeffery Travis Noyes, last name N-O-Y-E-S. And I'm counsel for
- the witness.
- LCDR Yemma: Captain can you describe some of your general responsibilities of
- 17 Commanding Officer of Marine Safety Center?
- WIT: Sure. In April 2015 I took over as Commanding Officer of the Coast Guard's
- Marine Safety Center. The Coast Guard's Marine Safety Center is the Coast Guard's
- central technical point for the review of engineering plans for commercial vessel design,
- construction, and operation. As Commanding Officer of the Marine Safety Center I set
- the priorities, oversee work, sign correspondence related to our functions and oversee
- the general administration of our work.

1 **LCDR Yemma:** Thank you, sir. Can you also describe some of your prior assignments 2 or work history that are relevant to your current position? 3 WIT: Thank you. I have over 15 years experience in engineering with the Coast Guard. 4 I started my career after graduating from the Coast Guard Academy as an assistant 5 engineer, shipboard engineer on one of the high endurance cutters. Following that I 6 spent another year ashore or a few years ashore working in Coast Guard engineering. 7 And then went off to get a Master's degree in fire protection engineering. Following that 8 degree I spent four years as a staff engineer at the Coast Guard's Marine Safety 9 Center. And then was assigned overseas where I carried out commercial vessel 10 inspections and investigations out of Activities Europe. Following that tour I was 11 assigned as the Chief of Prevention overseeing all Coast Guard prevention related 12 missions in the Port of Charleston, South Carolina. Then I came back and was briefly 13 assigned as a Division Chief to the Marine Safety Center before being reassigned to 14 other duties in Washington, D.C. Just prior to serving as the Commanding Officer of the 15 Coast Guard's Marine Safety Center I spent three years as the Chief of design and engineering standards at Coast Guard Headquarters where I developed international 16 regulations, U.S. Regulations and U.S. Policies related to commercial vessel design and 17 18 engineering. 19 **LCDR Yemma:** And the Master's degree you mentioned, sir, is that your highest level of education you completed? 20 21 WIT: It is. 22 **LCDR Yemma:** And do you hold any professional licenses or certifications? 23 WIT: I do not.

- **LCDR Yemma:** Thank you, sir. Captain Neubauer will asked questions.
- **CAPT Neubauer:** Good morning Captain Mauger.
- **WIT:** Good morning.
- **CAPT Neubauer:** This board is interested in the effectiveness of the alternate
- 5 compliance program. Because the El Faro was enrolled in that program. I know many
- of the aspects that we're going to discuss today date back to before your tenure as the
- 7 Commanding Officer of the MSC and I appreciate you coming down from Headquarters
- 8 to help the board understand the program better. And at times we may ask for your
- 9 professional opinion in regards to certain aspects of the ACP program. At this time Mr.
- 10 Fawcett has questions for you.
- **Mr. Fawcett:** Good morning Captain Mauger.
- **WIT:** Good morning.

Mr. Fawcett: So we'll explore two basic topic areas during the course of your testimony. The first will be the, as the Captain mentioned the alternate compliance program as it relates to your duties. And it includes the Coast Guard's Marine Safety Center's oversight of the authorized classification societies that actually carry out the work of the alternate compliance program. The second broad line of questioning will relate to the plan review for a vessel such as the El Faro and any subsequent questions related to that process. So the way this questioning will work is the Coast Guard will ask a set of questions on broad topic, when we complete that line of questioning we'll pass the questioning to the National Transportation Safety Board, followed by the party in interest that you see seated at your right and left. And then return to the Coast Guard before we move on to the following broad topic area. So anytime in this process you

would like to take a break please let us know. And just so you know that most people are familiar with the Coast Guard acronyms so if you could speak plainly when you do speak about our programs, and polices and directives and that would be very helpful, sir. So the first broad topic we would like to explore is the alternate compliance program. And if you could fill in a little bit the technical training that you've received related to marine engineer, briefly if possible.

WIT: Sure. So with regard to the technical training, that's me personally or that's the staff that's doing?

Mr. Fawcett: That's you, sir.

WIT: Okay, thank you Keith. So in terms of technical training, my technical training in this field started with earning a Master's degree in fire protection engineering, which provided a detailed understanding of the science and engineering behind some of the safety regulations that are in place, fire safety regulations that are in place for commercial vessel design and operation. Following that degree program as a staff engineer at the Coast Guard's Marine Safety Center I received on the job training at that time, this was the mid 90's in the review of commercial vessel plans, the application of regulations to that plan review and that training didn't result at that time in any sort of qualification or standards, but it was peer review process and you know worked my way up through the different levels of review and responsibility. Subsequent to that training, or subsequent to that tour I was assigned as the senior investigating officer at Coast Guard Activities Europe and went to several schools, formal schools at the Coast Guard's Yorktown training center where I learned about the marine inspections. Where I learned about casualty investigations and how to carry out those duties. While at

1 Activities Europe I carried out inspections of foreign flagged ships that are subject to 2 U.S. jurisdiction and conducted casualty investigations. And during that time period and 3 subsequent tour in Port of Charleston, I earned qualifications as – as an inspector, as a 4 casualty investigator and as security plan reviewer. 5 Mr. Fawcett: When you graduated from the Coast Guard Academy what was your 6 degree in? 7 **WIT:** My undergraduate degree was in math and computer science. 8 Mr. Fawcett: Thank you, sir. So the Coast Guard is an organization composed of a 9 wide array of components, but the regular Coast Guard is composed of Coast Guard 10 military personnel and civilians. So I would like to stick to organizational titles because people rotate in and out as part of our program. So what organizational person do you 11 12 directly report to? 13 WIT: So I report to the Director of Commercial Standards and Regulations at Coast 14 Guard Headquarters. It's a Senior Executive position, it goes by the title of 5PS. 15 Mr. Fawcett: Okay. So the people that don't understand what you just mentioned, the Senior Executive Service is what? 16 WIT: The Senior Executive Service is the civilian flag level equivalent or Admiral level 17 equivalent position. The Coast Guard's prevention program at Coast Guard 18 19 Headquarters is overseen by a Rear Admiral, Rear Admiral Thomas who is the Director 20 of Prevention Policy. Rear Admiral Thomas has three Senior Executives, or I'm sorry 21 two Senior Executives and one Captain that serves as Directors of the different areas of responsibility. And those are standards, compliance, and waterways management. So 22 I report to the Director of Commercial regs and standards who is a Senior Executive. 23

1 **CAPT Neubauer:** Captain could you speak a little closer to the microphone please? 2 WIT: Sure. 3 Mr. Fawcett: So within your command could you just identify the various departments 4 and divisions, you don't have to name people because they may change, but what are 5 the divisions within your command? WIT: Okay. The Marine Safety Center is organized into 5 different divisions. Basically 6 7 along the line of specialties for engineering, disciplines and review that occur within the 8 commercial vessel regulation. So first division is the hull division, hull division is staffed 9 primarily with Naval Architects and hull division is responsible for small passenger 10 vessel review and cargo ship review and those issues surrounding matters of Naval 11 Architecture and some marine engineering. The second division is the engineering 12 division. The engineering division is divided into two sub-specialties, one specialty 13 focuses on machinery systems, the other focuses on electrical. And the staff that fill 14 those billets or working those divisions have backgrounds in either mechanical 15 engineering or electrical engineering or related fields. The third, third division at the Marine Safety Center is the tank vessel and off shore division. This division focuses on 16 tank vessel issues, off shore support vessel issues and on off shore oil and gas facility 17 18 issues. The next division is the tonnage division. The Coast Guard's Marine Safety 19 Center is both the program manager and the policy implementer for the administration 20 of tonnage assignments to U.S. vessels. And then the last division is the vessel 21 security division. This division is staff primarily with contractors that review vessel

security plans submitted to the Marine Safety Center under the regulation.

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Mr. Fawcett: So would you characterize the work force in general that works for you as a group of people with a higher than normal area of technical expertise in shipboard operations, design and construction? WIT: Yes. The Marine Safety Center has approximately 70 staff in engineers total. Of that there's about 55 engineers at the Marine Safety Center. Those engineers are a mix of military employees and civilian employees. The 55 or so engineers that are the Marine Safety Center have a combination of over 70 related Master's degrees in engineering or technical disciplines. That about 25 percent of that staff has their professional engineering certification. About 10 percent of the staff has merchant mariners licenses. But on the whole on average our staff, which is a combination of both military and civilian, have on average about 10 years experience working in the maritime industry either as a Coast Guard regulator or as a mariner, or an engineer, filling out one of those roles. **Mr. Fawcett:** So we've heard a term discussed here this morning, the alternate compliance program, sometimes referred to as the ACP. Could you just in a nutshell try to describe what that program is? WIT: So the alternate compliance program was established back in the 90's, around 1995 to recognize that there is a considerable amount of work that's done by classification societies in the design, construction, review of commercial vessel plans, uh commercial vessel operations. And so the program was established to provide a means to give credit or recognition of that extensive work that's being done. And provide a way for – to minimize the duplication of, advert between the Coast Guard and the authorized class societies. So the program was established to recognize that for a

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WIT: Okay, thank you.

certain subset of vessels and under the alternate compliance program, only those vessels that get international certificates, they may not need to operate under international roots, but provided that they had international certificates and are classed by an authorized class society. The program was set up to streamline the plan review and inspection of those vessels by recognizing the work that was done by the authorized class societies as equivalent or acceptable to the Coast Guard so that the Coast Guard wouldn't have to do that review as well. Mr. Fawcett: So is that program you just discussed authorized by the U.S. Code which is U.S. law and regulation? WIT: It is authorized by U.S. Code and there are regulations that have been put in place to describe how it works, or describe the parameters of it, then there's subsequent policy as well. That policy is in the form of navigation and vessel inspection circulars or what we call in the Coast Guard NVIC that describe how that program is administered. In addition organizations within the Coast Guard's prevention program that have responsibilities under ACP also have published their own guidance, documents or policy. At the Marine Safety Center we have a marine technical note, a MTN that describes how – describes the roles and responsibilities for plan review submissions and oversight under ACP and we have an internal policy for our folks as well that describes their roles and responsibilities in carrying out the review, or the oversight review under ACP. Mr. Fawcett: Thank you, sir. I'm going to turn the following line of questions over to Lieutenant Commander Venturella to follow up on those questions.

LCDR Venturella: Good Morning Captain Mauger.

WIT: Good morning.

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LCDR Venturella: The focus of the next line of questioning will be on the oversight of the alternate compliance program and the ACS's authorized classification societies. Using the El Faro as an example please describe some typical plan review activities that engineers conduct, whether performed by Coast Guard or the authorized classification society. WIT: So that's a very broad question. The regulations describe what plans are required to be submitted to – what plans are required to be submitted for – that would lead to Coast Guard certification. The subsequent policies in NVIC 2-95 break this down a little bit more in detail in terms of what plans and what the responsibilities of the authorized class societies are to do those reviews. The class societies would then conduct review to those plans, a review of those plans to a formula that includes application of classification society rules, application of international standard leading to SOLAS or MARPOL, sorry the safety of life at sea convention or the environmental protection regulations under MARPOL. And they would conduct the review to those – to class rules, those international standards and then what's called the supplement which is a document that is published by the classification societies in concert with Coast Guard Headquarters that describes additional Coast Guard requirements that they must be met. And so during a typical plan review project or during a typical project leading to certification there are a well defined set of plans that need to be reviewed. The standards for each one of those systems is set out in the regulations or in class rules in

this case under ACP. And that review is conducted by engineers or technical folks that

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are responsible for doing that. As part of the ACP process we've delegated the plan review function to the authorized class societies so the Coast Guard's role in that is one of oversight. And so for work that is done on our behalf the Marine Safety Center tries to make sure that we know of the work that's been done. We receive notification that in a – we want to make sure that we receive notification of that in a timely fashion and then we use a risk based approach to selecting things that we're able to for oversight. If once we've selected things for oversight we want to make sure that those plans actually come to us. And then we conduct our review. Our review of the work that's done on our behalf is really focused on primarily on making sure that the processes that they've used to come up to conduct their review are consistent with Coast Guard policy, Coast Guard requirements that have been provided to them. And there are times though that we find that they've incorrectly applied the regulations, or have not applied a specific regulation and in that case we can transition from working on the process to effecting corrections to the vessel itself. **LCDR Venturella:** Captain you mentioned earlier the organization chart for the Marine Safety Center and how you broke it down at your office. Can you please describe the differences you're aware of between the organization at ABS technical and organization at the Marine Safety Center? WIT: There are – so our primary interface between the Marine Safety Center and ABS technical is with the Vice President of engineering in ABS Houston. And the Vice President of engineering is really our focal point for the resolution of many plan review issues and the working of the process for oversight. But ABS's review is often distributed among multiple offices whereas we have one single office where everybody

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- everybody works. So we have plans that come in, or I'm sorry we have notifications of plan review work that was done by the stability and load line group which is separate from ABS Houston. We have notifications that have been conducted by different ABS offices including ABS New Orleans or ABS offices overseas where work has been done. So we have a primary connection and a primary organization that we work with, but we often received notifications from multiple entities within ABS. **LCDR Venturella:** Based on that difference between American Bureau of Shipping's technical office and the Marine Safety Center organization in terms of one office where the Marine Safety Center and the MARPOL office is with the American Bureau of Shipping, have you noticed any difficulties or challenges related to either the oversight of the alternate compliance program or working between the Coast Guard and ABS with all those organizational differences? **WIT:** The alternate compliance program has evolved a lot over the course of the past two decades that it has been in practice. If you can imagine when we first started this program we actually received hard copy submissions of the plans that were reviewed on our behalf. We would have boxes of plans coming into the office and have to sort through them and that kind of thing. Over the last 2 or 3 years we've received on average over 11,000 notifications of work done on our behalf each year by authorized class societies of which ABS has done the bulk of that work. And so with this high volume process that we have things like submissions coming from different offices has been a challenge. So in the last 6 years and more specifically in the last 3, we've really tried to focus on the process to make sure that, again first we have a complete list of what work is being done on our behalf. Second we have a process both in the

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classification society and within the Coast Guard to ensure that when that work is done on our behalf that we're notified in a timely manner. Third that we are able to – that we have a targeted system or a risk based system for selecting things that we would like to do oversight on. Fourth when we've selected it to make sure that we actually get that work. That those plans are transmitted to us. And then fifth that we have a process to feed that process in place to work issues as they come up. And so as if we've identified a non-conformity during our oversight, that we have a system in place to track that through to correction. So as we've looked at this in particular in the last 3 years we've identified problems in each step of the way. From notification to selection, to receipt, to review and correction. So within the last 3 years in particular we've put in measurements in place, we've adjusted our information systems. We've put in new business rules to make sure that the work, you know that we're able to make sure that each one of those steps in the process is as effective as possible. But there's still gaps and we continue to work on those gaps. **LCDR Venturella:** Just one follow up on that Captain. The last thing you mentioned was about 3 years, the past 3 years I believe that you've been following up on, on the ACS performance, authorized classification society performance a little bit more. Can you please try to, from the best of your awareness describe why that started occurring more in the last few years when the program begin in 1995? **WIT:** Thanks Mike. So I don't know that there's a good single answer to why there's been more review in the last 3 years. What I would say as I described a minute ago the program has evolved considerably over the course of the last two decades from, you know stacks and stacks of manual plans coming into the office to more of an IT

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automated system working these. What we started to see, I guess one of the triggers from the last few years is we started to receive and identify problems with vessels that were in service that were enrolled in ACP and where they were design and plan review problems that should have been caught or should have been identified in early stages either design or construction. But certainly prior to operations. So the fact that there were examples of problems that were occurring on board vessels and operations that were attributed to design and plan review system failures and improper work done by the authorized class societies we really wanted to make sure that we took those issues head on as best we could. **LCDR Venturella:** You've already mentioned that you have a specific program for Marine Safety Center oversight of these authorized classification society plan reviews. Can you please describe that in a little more detail in terms of the plan review and tonnage measurement function of how it works specifically? **WIT:** Thanks Mike. So there's a number of different programs that allow classification societies to do plan review work on behalf of the Coast Guard. We've spent the majority of the time this morning so far talking about ACP, because that's relevant to the investigation at hand, but we also do oversight of work under 10-82, I'm sorry navigation of vessel inspection circular 10-82 which was a policy that delegated certain plan review functions for new construction or major modifications of U.S. flagged vessels to ABS. And back in the early 1980's. There's plan review work that's done on our behalf under NVIC 3-97, which is stability work that's been performed by ABS, or other class societies, sorry. And there is work that's done on behalf of issuing load lines under NVIC 10-85. And then there's the administration of the tonnage management, or

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tonnage measurement program which has its own separate authorities. So each of those programs feed into our responsibility to oversee this work done on our behalf. And so what we've set up is, and this is described in a marine technical note that's available on the Marine Safety Center's website that we use for our internal process, control and we expect the ACS's to use as well, the authorized class societies. So MTN 04-03 describes the Marine Safety Center's process in detail for plan and review oversight. And that MTN describes how classification societies are required to notify us of work that's done on our behalf. Basically there's a spreadsheet that they fill out that identifies the planned work that was done, it describes, there's a number of columns in it. Number of different drop down boxes that they select. And then on a frequent basis, often daily, those spread sheets are emailed in to the Marine Safety Center, that data is then aggregated into our internal data base or information system for the Marine Safety Center for review and selection and action taken to conduct the oversight. So that data, those spreadsheets get turned into our mascot data base, the branch chiefs then review the information that's in the mascot data base and identify plans that they wish to select for oversight from the list of those plans. We have a risk based system that guides the decision making of the branch chief in making those selections. But they're free to select anything from that list. And then once they select it our information system pumps out a notification back to the ACS informing them of the plans that they then need to submit to us for our review. Once those plans come in they get assigned out to a staff engineer who carries out oversight in accordance with some internal policies that we have. And that oversight might result in one of several findings. First of all we might not do any oversight on it and so not oversight is one of the valid findings in this

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process. We might not do oversight on it because as I've described this is a very manual intensive process. Engineers at the class societies need to enter information into the spreadsheet and select the category of plans and describe the plans. But when we actually get those plans it may be something that is not subject to our review. And so we might do no oversight. Or we might do oversight with no findings, or oversight with findings. And essentially there are three levels of findings. There's observations which are areas that the engineer may identify where there are questions, but it hasn't risen to the level of a non-conformity. The next step is a non-conformity and that is where there is – where the plans don't comply with a Coast Guard regulation or international regulation. And then there's a major non-conformity and those major nonconformities include things where they don't comply, the plans don't comply with the regulation, but the severity of that non-conformity is such that there is considerable concern for the safety on board the ship. And you could have a number of nonconformities aggregate into a major non-conformity. Once those findings are made the information then gets returned to the classification society and the - if there are nonconformities we track the resolution of those non-conformities through to the successful completion. Once a quarter I sit down with the classification societies that do work on our behalf, myself and my management team and we review the performance for the previous quarter and we review the status of all open non-conformities and discuss the resolution of those issues, or the pending resolution of those issues. **LCDR Venturella:** Captain, in the process you just described, is there a methodology

by which the marine inspector, Coast Guard marine inspector representing the Officer in

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Charge of Marine Inspection can flag an item for you to review instead of having it selected through your staff engineers? WIT: Yes. In cases, in some cases that's happened a few times. So the Marine Safety Center is the Coast Guard central technical point for the review of commercial vessel design, engineer and plans. We work for the OCMI's, although earlier we talked about my role on paper, on a wire line diagram I report to the Director of Commercial Regs and Standards, but we are the central resource for the field inspection workforce and we are here to serve their needs. So if they've identified something that requires our review they can pick up the phone, they can email us, they can contact us however. And identify that there is something that's outstanding that needs our attention or needs additional input from us. **LCDR Venturella:** Captain, from your best recollection what percentage of the oversight conducted by the Marine Safety Center of authorized classification society is actually flagged through the Officer in Charge of Marine Inspection? **WIT:** I don't have those statistics Mike. **LCDR Venturella:** Captain can you recall in the past year if there have been specific incidents of Officer in Charge Marine Inspection flagging items for your review? WIT: So within the past year, me personally no. But most of the times this happens at the staff engineer level and it occurs without my own personal knowledge. As I mentioned we have about 11,000 notifications from the class societies who worked on our behalf. In addition our engineers review about 19,000 plans, 18 to 19 thousand plans per year for work that we're directly responsible for. So there's a lot of work that goes on without my knowledge. If we look back at 2 or 3 years time we have

documented some specific cases of where the OCMI has notified us of oversight issues or areas of concern and we've pulled those plans. We've conducted oversight on them and we found problems that we're suspected from – by the OCMI.

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LCDR Venturella: Captain, approximately how much plan and reviewing tonnage measurement work is completed by authorized classification societies on the Coast Guard for that?

WIT: So the – we have two separate ways of measuring our workload. The authorized class societies measure their workload and report their information to us in a manner that aligns with their billing practices. The Marine Safety Center measures it's workload in a manner that aligns with the allocation of work hours. And those things aren't congruent so I can throw out a couple of the different statistics to give you some perspective of the work that the ACS's do. So if we look at last year and the relative ratios are similar for the last several years, but if we look at last year the Marine Safety Center did about 19,000 plan reviews for U.S. ship, barge and off shore facility review. And then a few foreign flagged ships that are subject to U.S. jurisdiction. Those plan reviews were broken down into about 11,000 specific activities. An activity is a system, like maybe a fire main system or a general arrangement or a stability review or something along those lines. So we had about 11,000 activities looking at about 19,000 plans. We know that the classification society as they have reported to us in the last 3 years that they reported about 11,000 notifications to us. Now there's not a one to one relationship between plan review and notification. There's not a one to one relationship between notification and activity. So that volume of work is hard to put a finger on, but it's somewhere between 1/3 and ½ of all the work that the Marine Safety Center has

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done. I think the other thing though that's clear about that work is it tends to be the large deep draft ocean going projects because of the way that the alternative compliance and other programs have set up. And so this is you know some of the more complex work that the Coast Guard is responsible for. **LCDR Venturella:** Captain, what is the general trend in the number of plans reviewed by authorized classifications societies? Is it trending upwards in the number of plans reviewed, or is proceeding down? WIT: So in general since the programs were developed the Coast Guard has become increasingly more reliant on the use of authorized class societies, delegation to authorized class societies. So the – if we were to look at the number of plans reviewed, we would see trends over the course of the past 5 years, if we stopped it at the end of calendar year 2015, sharp increases or about let's say 10 percent increases year on year and the number of notifications made to the Marine Safety Center. That is also though a function of the maritime industry so we were also during the period of growth in the maritime industry at that point, particularly off shore oil and gas sector. So that was driving a lot of that growth. We have not looked at the matrix in accounting for ships in the industry to see how much of our work has gone to classification societies, but we're well aware of the perceived benefits by the maritime industry of using these third party delegations. And we find that many ships are enrolling, the majority, I think all of deep draft ships in the U.S. are enrolled in some sort of third party delegation. Whether it's the ACP, 10-82, 3-97 or some kind combination of all of them. **LCDR Venturella:** Captain, about what percentage of the authorized classification society work is conducted by the American Bureau of Shipping?

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WIT: In excess of 90 percent. And that's – uh that would include all of the delegations that are granted to ABS. So that's ACP, 10-82, 3-97 and 2-95. But it's in excess and probably well in excess of 90 percent. **LCDR Venturella:** Captain, you specifically mentioned that a lot of the planned reviews that are being delegated through the alternate compliance program and other measures through navigation vessel inspection circulars, are the complex reviews, you specifically used the word complex. Can you comment on the impact of giving up the complex reviews on your staff engineers and their capacities? WIT: We have a, as I mentioned, we have a very highly educated and experienced staff at the Marine Safety Center. And so we are able to carry out complex reviews at the Marine Safety Center. And I would cite the recent conversion to LNG fuel here in the industry as an example of a complex emerging issue that we've been able to conduct the reviews on. We've retained 100 percent review of that ourselves. So we certainly have the skill and the ability to do complex reviews. There are areas though that we certainly don't have the bandwidth for lack of a better term. Or even tools available to conduct some of the more complex structural reviews including some of the finite element analysis. We can do that work for oversight and we can evaluate the work that's been done by others, but we don't necessarily have the in house, the full suite of in house engineering tools and expertise to do it in a commercially viable time frame. **LCDR Venturella:** Captain, approximately how much of the authorized classification society delegated plan review is selected for oversight and reviewed by the Marine

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Safety Center? And can you discuss some specific, how the selections are made by your staff engineers? WIT: Sure. So as I describe, Marine Safety Center has about 19,000 plans that we're responsible for that don't go through classification societies. Maybe about 11,000 notifications each year that come through the classification societies are work that's done on our behalf. And of those 11,000 plans we've traditionally selected a very small sample of the plans for oversight. Traditionally the numbers have been right around 4 percent. In the last 3 years we have selected between 4 and 6 percent of the plans for oversight. Now as I mentioned we do have that risk based approach to selecting the plans for our oversight. We have a risk ranking, an internal risk ranking matrix that looks at the types of safety problems that could result from that particular plan or system. And it helps our staff to prioritize the review. And we use that along with our own judgement to select the number of plans. So of the 11,000 plans, or 11,000 notifications that we receive from the ACS's in 2014, we reviewed about 500 different activities out of those plans. LCDR Venturella: Captain, can you share any measures or trends for how well the authorized classification societies have done during these oversight reviews in recent years? And can you specifically speak to how the American Bureau of Shipping has performed in these reviews in recent years? WIT: So I haven't broken out the trends for American Bureau of Shipping specifically, but again American Bureau of Shipping is well in – or in excess of 90 percent of the work that was done on our behalf in the last few years. So if we look at the 2012 to

2013 time frame which was a period that we ran some numbers on, again we had

between just under 10,000 and over 10,000 notifications in each one of those years.

identified discrepancies in, in excess of 16 percent of those plans. When we looked at

We selected about 4 percent of the plans, uh of those notifications for review and we

2014 we had about 11,000 notifications, we selected somewhere around 5 percent, we

identified discrepancies in 38 percent of those plans. I don't have the numbers for 2015

yet. But again this is something that we have committed to tracking and we discuss and

we present those results quarterly with the classification society.

LCDR Venturella: Captain, can you provide a few examples of the types of findings you typically see during these oversight reviews resulted in those discrepancy numbers you mentioned?

WIT: Sure. So for the discrepancies, the discrepancies for the last 3 years have been focused on vessel automation issues. So they've involved plans where an automation system was required by the regulations to address several different scenarios and we tested it in accordance with those scenarios and the plans didn't demonstrate that and the work had been approved on our behalf. They have identified structural, or they've involved structural deficiencies where the classification society made a determination about the structural integrity of the vessel design that didn't have adequate, or wasn't in accordance with the classification society rules in that case. They were problems associated with fire protection materials. That had – where materials that weren't properly tested in accordance with fire safety regulations were installed and locations where they should have been properly tested and this presented some risks of potential fires for a number of vessels.

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LCDR Venturella: Captain, when you presented some of the data from your review you mentioned 16 percent and 38 percent rate of discrepancy, or non-conformity finding in the reviews. Can you discuss any initiatives taken either by the Coast Guard or ACS in recent years with the aim of improving authorized classification society performance? And can you also elaborate why the rate may have gone up from year to the next? **WIT:** Yeah. So the, I think the rate change is a function of the fact that we select such a small sample size to begin with. And so with such a small sample size, although we do some risk based review of it, I think you're subject to wide variations and trends from year to year. In terms of what's been done about those discrepancies. So our focus in the oversight as described in the Commandant's policy, it's described in our own internal guidance is really on making sure that the classifications society has the proper training, procedures, processes in place in order to do the work as we would expect them to do at. And so when we look at those issues we really focus on making sure that those processes, procedures, training are in place. And so in the last 3 years we've done a number of things to get at that. We have conducted workshops with ACS staff to educate them and train them about different elements of our review. We've done staff exchanges where we've sent our staff there or we've hosted their staff at our office to make sure that there is familiarity with the processes. The classification societies have instituted many process changes to make sure that the reporting, the correction, that tracking of the resolution of those issues is done in a timely and proper fashion. And so those are the areas of focus that we've been working on. **CAPT Neubauer:** Lieutenant Commander Venturella I have follow up question. Captain Mauger, have you started the reviews for 2015? The 4 percent sample.

- WIT: So we have conducted reviews throughout 2015. I don't have the statistics with
- 2 me in terms of what the overall annual summary looks like. The staff are working those
- 3 right now as we speak.
- 4 **CAPT Neubauer:** Yes, sir. Could you give even a ballpark figure? If it's going
- 5 potentially up or down?
- 6 **WIT:** I would imagine it's consistent with prior years.
- 7 **CAPT Neubauer:** Consistent with 2013 or 2014?
- 8 **WIT:** In terms of the discrepancy rate I have no idea what the discrepancy rate was in
- 9 2015. I would imagine that the, I do know the number of notifications, again it was right
- around 11,000 notifications for 2015. I do know that we selected right around 4 4.8
- percent of those plans for review. I just don't know what the discrepancy rate is off the
- top of my head.
- 13 **CAPT Neubauer:** Yes, sir, thank you. Lieutenant Commander Venturella.
- LCDR Venturella: Captain, the alternate compliance program has been in effect since
- 15 1995, correct?
- WIT: Yes. I think there was a MOU that predated it, or an MOA that predated it by a
- year or two, but yes.
- LCDR Venturella: Captain, would you say that based on the amount of time that we've
- been using the alternate compliance program in the Coast Guard that it's a mature
- 20 program?
- WIT: It is a mature program in that we've had you know over 20 years experience
- working the program, but the industry continues to evolve, technology continues to
- evolve, the training, education, resourcing of our work forces both within the Coast

- 1 Guard and the ACS continue to change. And so there are elements of it that are a 2 mature program, but there elements that have evolved and changed in significant ways 3 over the course of the last 20 years. 4 **LCDR Venturella:** Captain, would you characterize your view of the discrepancy rate, 5 the 38 percent most recently observed, would that – would you characterize that as 6 surprising given the maturity of the program? 7 WIT: Yes. The – we were certainly astonished to see the high level of discrepancy rate 8 in the plans that we reviewed. And even more troubling and why it caused us to focus 9 on this in the last several years, is the examples that came up of vessels that were in 10 service where problems should have been identified and caught earlier. **CAPT Neubauer:** I didn't catch that last, the most disturbing aspect. 11 12 WIT: So one of the impetuses for us looking at this more closely in the last 3 years is 13 that we were identifying, you know the OCMI's identified problems on vessels that were 14 in service that were attributed to plan review problems. Design, construction, these 15 things should have been identified during the design, construction of the vessel as opposed to during operation. 16 CAPT Neubauer: And sir, did that, are you saying that they detected them because of 17 a marine casualty, or just from inspections? 18
 - **WIT:** Both. In some cases it was after a marine casualty and the investigators and inspectors went on board and identified problems post casualty. In other cases it was during their inspections that they identified problems.

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Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

- 1 **CAPT Neubauer:** And sir, can you give a percentage, a general percentage on how
- often we caught the problem before the accident and how often the problem was solved
- after the investigation? In very general terms.
- 4 **WIT:** I don't have a percentage.
- 5 **CAPT Neubauer:** Okay.
- 6 **WIT:** I don't have a percentage.
- 7 **CAPT Neubauer:** Thank you. Lieutenant Commander Venturella.
- 8 **LCDR Venturella:** Captain, have you had a chance post casualty of the El Faro to
- 9 review the plan review notifications from the American Bureau of Shipping to the Marine
- Safety Center? And what did you find in terms of the notifications line up with the plan
- review that was conducted?
- WIT: So we have looked at this within the Marine Safety Center I think. So the vessel
- was in service a long time. And so part of its operating history predates the Marine
- Safety Center and predates our records. And part of its operating history predates the
- alternative compliance program as well. And so the records that we looked at were
- related to records that the Marine Safety Center would have had over the vessel's, or
- had over the vessel's entire life. And then also within the last 9 years I believe, I think
- she was enrolled in ACP in 2006 time frame. So within the last 9 or 10 years, you know
- what do we have in our system in terms of notifications of work done on our behalf? So
- 20 ----
- 21 **CAPT Neubauer:** Captain, I'm sorry, but I think it's important. There were no
- indications of any work done on the vessel?
- WIT: No, no, I didn't mean to say that.

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CAPT Neubauer: Sir, I didn't hear the comment, I'm sorry. Can you clarify? WIT: So actually if I may, I forget was this specific to ACP or was this related to all types of plan review work that was done on our behalf? Because it varies over the course of vessel history. **LCDR Venturella:** Captain, I would like you to include the previous navigation vessel inspection circulars as well for which oversight was allowed. But if you could clarify as you go through on which ones were under the alternate compliance program as well. WIT: Okay. So what I would say for this portion of the discussion here is that I'm talking about records that we have available to us at the Marine Safety Center. The full text of those records can be made available to the Marine Board of Investigation. And so you know I hope not to misspeak about what's in those records over the course of the next couple minutes, but I just want to give you a general discussion of what's in there rather than the specific details line by line. So I think the Marine Safety Center was created in 1986. The first involvement with the El Faro that we have in our records I believe is from the time around 1992 when the vessel was undergoing a lengthening. And work was being performed on behalf of the Coast Guard to review the stability for the vessel by the American Bureau of Shipping. At that time the work – at that time NVIC 10-82, NVIC 3-84 – NVIC 10-82 which dealt with plan review done on behalf of the Coast Guard by the American Bureau of Shipping for new vessels or vessels undergoing a major conversion was kind of the governing policy. Then there was NVIC 3-84 that dealt with stability reviews done by ABS on behalf of the Coast Guard, but resulted in the Coast Guard issuing a stability letter. And then there was work related to load line assignments, that was also done on behalf of the Coast Guard. I think its 10-

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85, NVIC 10-85. But so our records, 1991, 1992, 1993 time frame talk about the lengthening project a little bit and but primarily the core focus of those records is the stability work that was done by ABS that resulted in us issuing a stability letter during that time frame. Subsequent to 1992, we received some engineering plans of, I apologize but I can't remember what they were, but some modification plans during the mid 90's to late 90's. But the next big chunk that kind of sticks out in my mind is some work that was done in 2002 to 2004 time frame related to the conversion of the vessel from roll-on roll-off to load-on load-off and at which point the Marine Safety Center was responsible for making a major conversion determination under the U.S. law. So there's discussion in our files about that time period. Subsequent to that time period there may be some additional engineering plans in the 2004 to 2007 time frame. But I can't recall exactly off the top of my head what those were. But then at that point she's enrolled in ACP and all of the plan review work is being done on our behalf. And so subsequent to 2007 within our records we have – we are aware but I don't know that we did any work, we have no – none of the technical work in our files. None of the submissions, we just have a cover letter that states that work was done on our behalf for stability under NVIC 3-97 at that point. But we didn't do any of the follow up review, or if we did we have no record of it at the Marine Safety Center. And then most recently in May of 2014 and subsequent to that we have about 5 notifications through our plan review notification system of work done on our behalf for piping penetrations and P&ID diagram for work that was done on El Faro and then electrical one line diagrams for work that was done on our behalf. We did not oversee any of that work, or did not pull oversight on that work.

CAPT Neubauer: What year was that, sir?

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WIT: That was, I know that we received the P&ID notification on May 7th, 2014. I don't know when we received the electrical one line diagrams, but we'll have it in our system. **LCDR Venturella:** Captain, so based on that discussion would you say your analysis says that you've been notified of all known ABS plan reviews on El Faro on the Coast Guard's behalf? WIT: I can't say that at this time. One of the key challenges that we still have with the alternate compliance program is we don't know what we don't know. And so, and that's a Marine Safety Center view point on this issue. The Marine Safety Center is in the business of conducting the technical review to assist those that are issuing the certification to the vessel. And so we don't typically aggregate all the work or manage a specific vessel. A plan comes in, we review the plan, we send it back out. But we don't typically aggregate all the work for a particular vessel and see do we have, you know the regulations require us to look at this vessel from A to Z, having looked at everything from A to Z. That responsibility rests on the Officer in Charge of Marine Inspection who is issuing the final certificate to the vessel to make sure that all of the regulatory requirements have been met. And we do some different things to provide assistance to that. So what we don't know is our system is triggered right now on the class society notifying us that they've done work on our behalf. If they don't notify us we don't know that the works been done. And so we see that as a gap and I think it's a common sense kind of thing that's a gap. And so we're trying to figure out a way to address that and what can we do internally, what can we do externally to make sure that we know of work

that's done and that they're reporting everything that they need to report to us.

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LCDR Venturella: Captain, you mentioned that there have been specific ideas about closing this gap. Can you mention any specific plans or ideas that have been proposed but not finalized for closing that gap between the notifications from any authorized classification society and the Marine Safety Center? WIT: So there – we've done a number of things during the last couple years to close the gap between when work is done and when the Coast Guard's notified about the work that's being done. So in prior to 2014 there could be a lag time of, or the average lag time for notification was close to 2 months between work was – when a plan was approved by the ACS and when they notified us that they had approved the plan. And so we did some considerable work and ABS in particular made numerous process improvement to cut down the gap between review and notification to a real time couple of days. And they've held it at a couple of days now for a better part of the year. So that's one of the gaps. And then we've worked on that. We've also had identified gaps in when we selected something until when we actually received it. It turned out for years that we focused, you know in the last 3 years when we focused in on this matrix we were receiving only about 70 percent of the plans that we had requested. Again we requested a very small number, but we only received 70 percent of that small number, you know for our review. And so we wanted to make sure that there was no gap there. That you know if we requested a plan that we receive the plan. And so we changed our internal database to make sure that we could track that and make sure that we – we got everything that we asked for. But the gap that still remains is this we don't know what we don't know and that's, you know we don't know when ACS has done work on our behalf unless they've told us about it. This is really something that I don't have any

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specific solutions for at this point. But I think between the different information systems that are out there between the different reporting requirements out there we should be able to get at this number and address this. **LCDR Venturella:** Captain, I believe you mentioned that approximately 30 percent of the selected plan reviews that you don't actually receive the plans and that you're working on that gap. Do you believe that besides tracking internally better that there's a way that you could have through the program, better working with the American Bureau of Shipping so that the responsibility is on them? WIT: So I think the responsibility is on them. It's on us to follow up as well. But certainly the responsibility is on them to provide the plans that we've requested. It's laid out in the memorandum of understanding, it's laid out in the Commandant's policy. But we want to make sure that we have the ability to check and verify and validate that. So the 30 percent was I think looking at a discrete data set from the 2012 to 2013 time frame would put a focus on that in 2014. And I'm not aware of – and during 2014 we received 100 percent with the plans that we received. So I think it was just rechecking, you know our system and making sure, in our system and making sure that the process was working. And so I think with the leadership emphasis on that point and you know some adjustments to the process data base is we've got that piece working. But there's still more work that needs to be done in other areas. **LCDR Venturella:** Captain, what is the typical level of Coast Guard Marine Safety Center review of oversight, oversight and reviews? And who decides this level of review?

- 1 **WIT:** So our internal processes lay out provide guidance to the staff engineers for
- 2 how to conduct their review. That level, so I'm sorry, are you talking about on an
- individual plan basis, or are you talking about like 4 percent, 5 percent, 6 percent?
- 4 **LCDR Venturella:** Individual plan basis Captain.
- 5 **WIT:** Okay, thanks. That's what I thought you were asking. So the staff engineers are
- responsible for determining the level of review, they're working with their branch chiefs
- 7 to address any questions and conduct that review.
- 8 **CAPT Neubauer:** Sir, we've been going for about an hour and a half, would you like to
- 9 take a break at this time or keep going?
- 10 **WIT:** I'm okay for now.
- 11 **CAPT Neubauer:** Sir.
- 12 WIT: I'll defer.
- 13 **CAPT Neubauer:** No we can keep going.
- LCDR Venturella: Captain, has the Marine Safety Center issued any observations,
- non-conformities, or major non-conformities to the American Bureau of Shipping?
- 16 WIT: Yes.
- 17 **LCDR Venturella:** Can you please elaborate on the details of that in the past couple of
- 18 years? And could you cite any specific examples and numbers of major non-
- 19 conformities and non-conformities?
- WIT: Sure. So I mentioned a couple different cases already that where we identified
- 21 non-conformities and major non-conformities. I the specific numbers I am lost at for a
- moment here, but we can provide those records if desired on the number of non-
- conformities. But in the past 3 years we've issued major non-conformities and non-

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conformities to – in one case to I think about 40 on one particular vessel dealing with automation and dealing primarily with problems in the automation system, the periodic safety test procedures and design verification test procedures. Another case we issued non-conformities dealing with structural issues. Another case we issued 84 nonconformities, or major non-conformities to essentially 84 different vessels, but it all stemmed from the one issue associated with the unapproved fire protection, or material that were installed in fire protection bulkheads. LCDR Venturella: Captain, does the Marine Safety Center define major nonconformities similar to the international safety management code in which you indicate that the non-conformity itself is a serious threat to the vessel or the environment? WIT: Mike, I don't have the ISM definition in front of me. What I would say is we've laid out our definition in MTN 4 – 04-03 which is available online. But I have not looked at it to see if it's the same thing as what ISM says. **LCDR Venturella:** Captain, based on those major non-conformities and non-conformity issues as we just discussed, has the oversight process been effective in driving American Bureau of Shipping improving? WIT: Yes. There – you know as I've described during my testimony here the Coast Guard is reliant on these third party delegation and third party programs. There's a large volume of work that goes through the authorized class societies. And we found good cooperation in addressing issues when they've been identified by the classification societies. We've observed in the last three years a significant willingness to change and alter processes and improve performance. But we're still looking at just a very small amount of the work that's done on our behalf.

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LCDR Venturella: Captain, can you provide some recent examples of improvement due to the oversight process, specific examples of where you can site that the intervention of the oversight by the Coast Guard has resulted in ACS improvement or American Bureau of Shipping improvement? **WIT:** Sure. So for the example that I talked about with regard to the improper approval of fire protection materials on board 84 different vessels, the authorized class society developed a, these were all deemed major non-conformities so in addition to fixing the processes we had to go out and fix the vessels themselves. So the ACS in this case, ABS identified a plan to address the issue both immediately from notification and crew awareness to longer term mitigation remediation of the materials including the removal of the materials. So that – and they put – used their class – classification process to provide notice and facilitate corrective action on board those vessels. That's still ongoing, but it's moving in the right direction. In addition they took a number of steps internally to modify their processes for training the engineers that were doing the fire protection review and making sure that the guidance that they had was clear in terms of how to handle materials that were used in rated bulkheads. So that's one example. I mentioned earlier about the fact that they, ABS in particular has made numerous improvements to the reporting, tracking and delivery of notifications. They've put one one of their manager in charge of overseeing all the reporting to the Coast Guard. And so we've gone from, you know 60 days between when a plan was approved on our behalf till when we were notified back in 2012 to right around 5 days, 5 or less days now. And so I think that's another area where they've made improvements.

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LCDR Venturella: Captain, you mentioned specifically a structural fire protection major non-conformity, can you please elaborate on the selection of that particular item for oversight? Was it flagged through OCMI intervention, Officer in Charge of Marine Inspection intervention, or through Marine Safety Center staff engineering? **WIT:** It was identified initially through the OCMI. **LCDR Venturella:** Captain, can you discuss any overall challenges or obstacles that make this program more challenging from an oversite perspective? **WIT:** I think throughout the course of my remarks I've highlighted a couple of areas. One we're very dependent on the system. So it's hard to change a system that we're very dependent on. The volume of the work that's going through the classification societies on our behalf is, you know as I mentioned in terms of Marine Safety Center, it's at least a third if not a half of the total workload that we're responsible for. And the last area that I would say is accountability. We rely on, you know the class societies have been given these delegations to do work on our behalf and as I mentioned they are – they work at this issue hard, but they're faced with some of the same challenges that we are in terms of staff turning over and people rotating in and out and maritime industry having and flowing in terms of experience. And so you know they're challenged to keep up and make sure that their staff are trained and properly carrying out discharging their duties. But I think when we do run into areas of concern, issues, problems, things that need to be corrected, we have received good cooperation to make sure that those things are being corrected. But the accountability hammer, the accountability method for the Coast Guard I think is still not really there. When we talk about these delegations and these alternative authorities the primary method of

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accountability is dis-enrolling that vessel from the program. The primary accountability, which then puts more work on the Coast Guard you know if that happens, the primary accountability is not in taking penalty action against the classification societies or those authorized to do work on our behalf I guess. Best way to describe it. **CAPT Neubauer:** Captain I have a follow up question on that point you made about the primary accountability being dis-enrolling of the vessel from the program. Do you have specific knowledge of the number, total number of vessels over the 20 year history of ACP that have been dis-enrolled from the program due to poor performance of the vessel compliance? WIT: I do not. Captain McAvoy who is, I believe appearing before this MBI later today or tomorrow will have that information. CAPT Neubauer: Yes, sir. **WIT:** Or could answer that question. **LCDR Venturella:** One final question for this line of question for this line of questioning Captain, would you say that for vessels like the El Faro with plans reviewed by authorized classification societies like the American Bureau of Shipping through our delegation programs that the plan reviews are conducted as thoroughly as those reviewed by the Coast Guard? WIT: I don't have a clear answer to that question Mike. First of all it's an opinion question as you phrased that. And the – it relies on comparing work that's done on our behalf to work that we would do on our own. And so I think it's a difficult question to answer directly. There are a number of different systems out there and there are a

- number of different plans. So I can't give you a short quick answer of that question. It's
- 2 difficult.
- 3 **LCDR Venturella:** That's all I have for this line of questioning Captain.
- 4 **CAPT Neubauer:** Commander Denning do you have any questions?
- 5 **CDR Denning:** I do, sir.
- 6 **WIT:** Before we get started Captain Neubauer would it be possible to take a 5 minute
- 7 break or so?
- 8 **CAPT Neubauer:** Yes, sir. The hearing will now recess and reconvene at 1040.
- 9 The hearing recessed at 1033, 22 February 2016
- The hearing was called to order at 1045, 22 February 2016
- 11 **CAPT Neubauer:** The hearing is now back in session. Commander Denning.
- 12 **CDR Denning:** Good morning Captain.
- 13 **WIT:** Good morning.
- 14 **CDR Denning:** In the very beginning of your testimony, sir, you spoke about your prior
- units and your time as a staff engineer at Marine Safety Center. Can you remind us
- what year that was, sir?
- 17 **WIT:** I was assigned to the Marine Safety Center as a staff engineer in the hull division
- in the major vessel branch from 1997 to 2001. After September 2001 while I was still
- assigned to the Marine Safety Center I was detailed to Coast Guard Headquarters for 9
- 20 months to work on staff as Port Security Director.
- 21 **CDR Denning:** Understand. And at that time Mr. Fawcett asked you about training and
- I believe you said at that time training and plan review was all OJT, is that correct?
- 23 **WIT:** That's correct.

1 **CDR Denning:** Were there checklist used, or how did that training take place? If you 2 could go into a little bit more detail. 3 WIT: There were checklist and instructions available to us. But we were also paired 4 with senior Naval Architects, marine engineers, or senior engineers working in the same 5 branch as us that would do peer review on our work. 6 **CDR Denning:** Was that process – how did that process evolve over time to the best of 7 your knowledge prior to you being assigned to MSC? In other words from inception of 8 the Marine Safety Center until the time that you arrived there. 9 WIT: So I would say that there were similar goals in place prior to my arrival at the 10 Marine Safety Center back in 1997, but it was – the unit was still in its infancy up until, you know it was really just getting its legs underneath itself in the mid 90's. So when 11 12 the work – prior to the Marine Safety Center the Coast Guard's engineers responsible 13 for plan review were distributed at several different sites around the country in regional 14 technical offices. When they created the Marine Safety Center they consolidated all of 15 that stuff, all those functions as Coast Guard Headquarters as the Marine Safety Center. And then there was a period of time, and so that brought with it a huge backlog 16 of work. It was about a year backlog from when a plan was submitted to the Marine 17 Safety Center until when the Marine Safety Center responded to it. And the unit moved 18 19 once or twice during that time period and so there was some uncertainty and unsettle, 20 by the time we get to mid 90's things were starting to settle down and processes were

being put in place and it was a much more normal process.

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CDR Denning: And then if you could also then explain after your first tenure at the Marine Safety Center until present day, how has the training program evolved since that time?

WIT: It's evolved considerably since that time. So we now have a process instructions for every type of activity review that we do that describes it. We have external guidance that we push out on our website to the industry to help the industry get the details of the plan review submissions done correctly the first time. Those are called plan review guides. And then in terms of the training we even instituted some internal qualification boards for members which we didn't have when I was there as a staff engineer. So members that are assigned to conduct specific reviews will go through a professional qualification standard, again internally developed. And then sit down in front of a board of their qualified peers and colleagues and answer questions and then earn qualification. That's for some of the cases. In other cases we use peer review, we still use peer review and branch chief or supervisory oversight to ensure the quality of our work. In addition, and Commander Denning I may have misspoke a little bit. The majority of the training both when I was a staff engineer and now is focused on in house training. But we do as part of our overall training efforts require engineers to go to external courses. Those might be commercially available courses such as using GHS software which is a software that's used for assessing vessel stability. Or they may be other electrical engineering courses or fire protection engineering courses. We do also conduct staff exchanges as part of the required training. So it's not quite, it's all in house developed programs, but it's not just all in house training.

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CDR Denning: Thank you, sir. That's all the questions I have on this particular line of questioning. I'll pass to Mr. Fawcett. **CAPT Neubauer:** At this time I'm going to answer – or question the witness. Captain, I just have a few questions related to the audits that were conducted in 2013 and 2014. Realizing that was before your time, but I would like to discuss the 16 percent and 38 percent error rates. Doing some calculations that turns out to be about 27 percent error rate over the two years. And I believe there would be about 10,000 plans each years that were not audited, does that sound about right, sir? WIT: So I would just like to be careful with the use of the term audit. So in the first case the reviews that you're talking about are the summary statistics that I provided. Those were the results of an annual report that the Marine Safety Center did for internal audits, internal audiences about the status of oversight, of our oversight of work done on our behalf. So neither of these were audits in the traditional sense of the word audit. And then so during the 2012 to 2103 time frame I think we looked at, or the report captures about roughly 19,000 notifications between those two years and attributes about a 16 percent error rate to the things that we oversighted. There were no, and again we oversighted a small percentage, roughly 4 percent of the notifications that we received. There's been no efforts to look at what would have been the error rate if we oversighted 10 percent or 20 percent or whatever. All I can tell you is this is what we conducted, this is the oversight that was conducted, this is the error rate that we found on the plans that we oversighted. CAPT Neubauer: Thank you Captain. So I'm considering the number of plans that did not receive your level of, or the level of review by the Marine Safety Center. And if an

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average error rate were extrapolated out that would calculate to about 5,400 potential plans with errors over the two year period if the same percentage error rate was applied to all of the pool of plans. Would you say that's a rough number if the error rate held constant for the two years? WIT: I'm not sure that you can, uh I'm not sure it would be valid to extrapolate that number out to look at the, and assume that the error rate would be the same for all of the other plans that are out there. Again, we do risk based targeting of the plans that we receive. So you know it's not a general selection from the pool of notifications that are there. The branch chiefs have their discretion to do selections that aren't on the risk based approach. But I'm not sure that you would be able to extrapolate that same error rate out. I think what we concluded from it was that we only looked at a small percentage of the work that was done on our behalf, that's what, you know we were able to accomplish. Within that small percentage there was a significant error rate, or alarming error rate. **CAPT Neubauer:** Is there a set level error rate, say for 2015 where you would take action to pull back the reviews to the Marine Safety Center? And I mean a level of like 50 percent, is there anything in place? WIT: There is no standard for that either in our internal office policy or within Coast Guard policy. And again, you know I think we would have to look at the guidance within NVIC 2-95 that sets up how the program is supposed to be administered and run and there's nothing in those policies that would call for us to take away delegated functions from the classification societies.

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CAPT Neubauer: Is it an action you could take if you were – if the error rate was too high or unacceptable in your opinion? **WIT:** I don't think that we could. I – I think we could, yeah, I think we could perhaps target more oversight, but we oversee a very small percentage of work that's done on our behalf because there's a large volume of work that's done on our behalf. There's a large volume of work that we're already responsible for. And so the, you know our ability to take on more work over a very short time and period would be challenging and may induce other errors into the system. **CAPT Neubauer:** So if I understand it right you really don't have the capacity to take on the workload? WIT: That's correct. **CAPT Neubauer:** So what would be the main accountability function if the error rate is unacceptable for 2015? How would you ensure the quality of work actually improves, starts on the improved cycle? WIT: Well what we would do, and I think we would use the same processes, same approach that we've put in place in the last 3 years to address these types of things is, you know for each of the errors that have – would you now be in the system, we'd make sure that the processes and the procedures at the classification society where those errors developed were altered to correct that. And then we would follow up and look at you know additional information to validate that that is still – that they've still been corrected or that they continue to be fixed. I think it's a combination of management, careful management oversight. It's a combination of looking at the information and

1 reacting and taking action based on you know what the information was telling you. But 2 it's essentially a management training, education, awareness kind of problem. 3 **CAPT Neubauer:** If the error rate is high in 2015 do you have plans to expand the 4 audit, the review sample? Instead of, you know rising from 4 percent to a new level or 5 do you have the capacity to be able to do that? 6 WIT: We haven't made any decisions on that at this point and so I don't have an 7 answer for you on what we might do. 8 **CAPT Neubauer:** Thank you. At this time I'm going to pass the questions to Mr. Roth-9 Roffy of the NTSB. 10 Mr. Roth-Roffy: Tom Roth-Roffy, NTSB. Good afternoon, sorry, good morning 11 Captain. 12 **WIT:** Good morning. 13 Mr. Roth-Roffy: It seems like we've been here all day. Sir, I just have a few questions 14 for you, mostly follow up to the questions already been asked. Sir, you've spoken, you 15 summed up about the training qualifications of your staff at the MSC. Do you have an understanding of the levels of qualifications, training, and education at the ACS, the 16 approved classification societies? Are they comparable to your staff's? 17 WIT: They are. I don't have those detailed understanding of the qualifications as I do 18 19 for my staff. But the basic management processes and instructions that they have in 20 place are similar. And so they, you know we often hire from the same pool of engineers 21 for work. We have plan review guides and they have plan review guides that describe

how to conduct their job. And then they have management oversight on the quality

assurance. So they're similar and the training is probably similar.

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1 Mr. Roth-Roffy: And sir, do you know if the ABS is a quality certified organization? 2 WIT: Not 100 percent sure what that term means, so I know that there's ISO 9000 has 3 a number of different series of quality certified organizations. I know that ABS has at 4 least one of those certifications along that. I know that they have an internal quality 5 management system. Again when we identified discrepancies, or non-conformities, 6 sorry, we you know are briefed on how their quality management system is updated to 7 account to, or to correct those problems at their level. 8 Mr. Roth-Roffy: So the Coast Guard does review the audit results from their external 9 auditors? 10 **WIT:** The Marine Safety Center does not. Mr. Roth-Roffy: So do you know if there's specific processes for plan review are 11 12 auditors, part of their quality management system. 13 **WIT:** I don't know the answer to that question. Mr. Roth-Roffy: Sir, you mentioned that I believe some plans must be reviewed by the 14 15 Coast Guard and others can be reviewed by external organizations such as ABS. Could you please give some details of which plans the Coast Guard must approve? 16 **WIT:** Sure. The – so there – again there's a number of different delegated authorities 17 here and so there's a couple different situations involved in the different delegated 18 19 authorities where the Coast Guard is responsible for reviewing plans. So under the 20 alternate compliance program, we'll narrow the scope a little bit and just talk about that program. That program, again we talked about the methodology where there's class 22 rules, international regulations and then the Coast Guard supplement. In cases where 23 one of those elements doesn't cover the issue that is under review, then the Coast

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Guard is responsible for reviewing those plans. And so a good example of that would be the LNG fuel systems on board the latest container ships and off shore supply vessels that are being built here in the U.S. So in that case those vessels are enrolled in the alternate compliance program, but because there are no international standards and it's not addressed in the supplement the Coast Guard is responsible for 100 percent review of the fuel system. There are other cases where the Coast Guard is directly responsible for the review, small passenger vessels for example are excluded from some of the delegated authorities so in those cases the Coast Guard's responsible for the review of those plans. There are probably some other examples that I just can't think of at the moment. Mr. Roth-Roffy: Sir, have you been able to identify any specific casualties, marine casualties related to errors made in plan review by either the Coast Guard or the alternate compliance – alternate classification, sorry classification societies? WIT: I'm not the person to answer that question. I personally haven't. If there is a good answer for that it would be in the findings of the investigative authority on that. But I personally haven't. Mr. Roth-Roffy: And we've been talking about the review of plans. These plans presumably are created by others and submitted for review and approval. Is there any responsibility for the creator of the plan in errors if they're detected? Is anything – is there any improvements to the system that could be, perhaps had by going back to the actual designers? **WIT:** I think the designers are responsible for you know errors in the plan. We at the Marine Safety Center when things are directly to us, when we're directly conducting the

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plan review on it, our motto, our desire, our emphasis is on getting the plan right the first time. And so we put a lot of guidance out on our website, plan review guidance to help submitters get plans done right the first time. I think that the industry as a whole, you know we have professional engineers and professional Naval Architects and the like that are submitting the plans. So I think you know for their profession, for their economic liability they try to get things done right the first time as well and make sure that plans are correct as they are coming in. Mr. Roth-Roffy: So the approval stamp on the reviewer that does not remove any responsibility for errors from assignment, is that correct? WIT: Legally I don't know, but you know practically I don't think that it does. Mr. Roth-Roffy: And sir, referring back to the discussion of problems with the ACP program and one of them you identified was the just don't know what you don't. Would you consider that to be a significant issue that you have to deal with, I know it's difficult to talk about it because you don't know, but you know just thinking kind of a theoretically, how big of a problem you think that might be? WIT: Unfortunately I don't know how big of a problem it is. But I do think it is a significant problem. I do think it's a significant problem in the structure of the program because we would, you know as we delegated these authorities to others while they are responsible under the delegations for doing work on our behalf, you know it seems logical, it seems reasonable to assume that we would know of work that's done on our behalf. And so that's, you know I think that we – in order for this to work we need to close that gap some.

1 Mr. Roth-Roffy: So to address this issue, do you think there's any feasibility in having 2 a person that's ordering the work of the classification society to, or if a contract is 3 awarded that they would also simultaneously notify the Coast Guard and then the Coast 4 Guard could then prepare those awarded contracts to civilian clients? 5 WIT: So I think that is an example of something that should be done. The – what I 6 would just like to clarify is that I'm speaking from the Marine Safety Center's perspective 7 at this point and have been during my testimony. So before a vessel is enrolled in the 8 alternate compliance program the owner or the yard that's constructing vessels is 9 required to notify the Coast Guard, the local Officer in Charge of Marine Inspection, the 10 local Officer in Charge of Marine Inspection is required to review the application and 11 forward that to Coast Guard Headquarters for final approval. So there are steps along 12 the way to making sure, you know to try to make sure that everybody is fully aware of 13 what needs to be done and what will be done. But it's not infallible. 14 Mr. Roth-Roffy: Thank you, sir. That's all I have. Mr. Brian Young. 15 Mr. Young: Good morning Captain. 16 **WIT:** Good morning. Mr. Young: Do you have the number of deep draft vessels that are currently enrolled in 17 the ACP program? 18 19 **WIT:** I don't. Perhaps Captain McAvoy has that number with him. 20 Mr. Young: And does the MSC have a target time frame for receiving notifications to the approval process? 21 22 WIT: So for work that's done on our behalf our instructions or MTN requires them to

notify us as soon as possible. We think that a matter of a couple of days, you know 5

Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

- days a matter of a week is essentially real time notification for these types of issues. So
- we would like to see plans come in, in 5 days or less. Notifications coming in in 5 days
- 3 or less.
- 4 **Mr. Young:** Thank you. And is the MSC plan review subject to audits by third party
- 5 auditing companies?
- 6 WIT: So I'm sorry, so are our processes and procedures subject to audits by third
- 7 parties?
- 8 **Mr. Young:** Yes.
- 9 **WIT:** I no, no they are not.
- Mr. Young: Are internal audits conducted by the plan review system?
- WIT: So we do have as a party to international conventions, the Coast Guard as the
- lead Federal agency for enforcing these maritime safety regulations is subject to
- external audits by the IMO. Those external audits started a few years ago on a
- voluntary basis and they're now transitioning to a mandatory basis. So we do have, the
- 15 Coast Guard does have an internal audit review team that follows the same procedures
- that the external audits would do. Those are looking at the whole of how the Coast
- Guard administers its responsibilities under these international treaties. Plan and
- review is a small subset of that. And so I guess thinking about the broader picture of my
- answer to the first question is we would technically be subject to those external audits.
- They have not occurred on a mandatory basis yet. We do have an internal audit staff
- that follows the same procedures and looks at the work that we do.
- Mr. Young: What's the frequency of those internal audits?
- 23 WIT: I don't know.

1 Mr. Young: Are you aware of any non-conformities that have been raised in these 2 audits? 3 WIT: Not specific to our plan and review. Again the last audit was a voluntary audit that 4 looked at the whole of these duties across all of the prevention missions, or all of the 5 prevention units. So I'm not aware of any plan review related ones for those. 6 Mr. Young: You discussed earlier about the gaps in notification between the ACS and 7 the Coast Guard. How were those gaps notified, uh noticed I'm sorry and brought to the 8 attention of the MSC? 9 **WIT:** So we instituted a process by whereby the classification societies report the work 10 that was done on our behalf, done on a spreadsheet to us. So each line item on this spreadsheet is a single notification, it may involve multiple plans, it may involve multiple 11 12 activities or it just may be a very discrete single plan that they did. It's essentially a unit 13 of billable work for them. And so when those spreadsheets came in they indicate the 14 date that the plan was reviewed and then of course we have the date that the 15 information was submitted to us. So that's where we identified the gap in the notification delay. 16 Mr. Young: And are there any repercussions to the ACS's for not notifying the plan 17 review? 18 WIT: No. 19 20 Mr. Young: Can any plan reviews be conducted at the OCMI level? WIT: Yes. 21

Mr. Young: And how about the OCMI is trained to conduct these plan reviews?

1 WIT: So there are a subset of plans that the OCMI is responsible for reviewing, fire 2 control plans, life saving equipment arrangements, those types of things. Their – in 3 prior years there have been – there has been a plan review course that the training 4 center in Yorktown that would teach inspectors how to review those plans. In some 5 cases that experience is also passed down locally through on the job training and 6 through internal unit qualifications and that thing, that type of thing. But it's a subset of 7 the work that's done. It's mostly focused, I think at this point on verification, on board 8 verification arrangements, those types of things. 9 **Mr. Young:** And are those reviews communicated up to your office? 10 **WIT:** Under the regulations we're not responsible for them, so they're not communicated back to us. 11 12 Mr. Young: Is there any oversight or checks and balances on daily use? 13 **WIT:** Not that I'm aware of. 14 Mr. Young: And my final question, the 38 percent from the annual report, did that 15 trigger any further oversight reviews? **WIT:** It did not. It did not. It - no. 16 17 **Mr. Young:** Thank you. **CAPT Neubauer:** Before we go to the parties in interest Captain I have a question. In 18 19 your opinion do the primary OCMI's, and I mean the Sector Commander decision 20 makers in the field have the technical expertise in marine safety background to oversee 21 that plans are properly submitted followed through the onboard verifications that are conducted in the field and also to carry out the duties of the subset that they have – of 22 23 subset of plans that they review that they're delegated?

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WIT: The – I think the way that you asked the question you made it a little bit difficult to answer because the OCMI does not need to be the Sector Commander. And in some units it's not the Sector Commander. And so what I would say is that the OCMI, the Officer in Charge of Marine Inspection needs to have the skill sets that you mentioned and needs to be aware of the decisions and be able to capably oversee the decisions that are being taken by the inspection work force. And – but, but in some cases the person with the resident experience is the OCMI, in other cases the person that title rests with the Sector Commander who may or may not have those skills, but will have staff that could have those skills. **CAPT Neubauer:** So I just want to be clear though. That the individual – there are individuals throughout the Coast Guard that are the primary OCMI that do not have the requisite skills you just mentioned? WIT: To my knowledge yes. But I'm, this is me as a Coast Guard officer not as the Commanding Officer of the Marine Safety Center. **CAPT Neubauer:** Yes, sir. I was just wondering if they could do the job that the Marine Safety Center is relying on them to perform or oversee. **WIT:** So I would – so you know under the regulations the OCMI is ultimately responsible for the certification of the vessel. The Marine Safety Center is a resource to the OCMI to help them get their work done. We at the Marine Safety Center do feel like in the last several years we are called in to assist and support OCMI's in cases where we wouldn't have been called in the past because of potential derogation of experience or qualifications in those positions. But I can't take a position on the whole of that issue at this point.

- any civil or administrative proceeding, other than an administrative proceeding initiated by the United States. 1 **CAPT Neubauer:** Yes, sir. But in your opinion from your experience in the last several 2 years it appears from your perspective that the OCMI level of experience has degraded 3 so that you have to intervene more often? Would that be an accurate statement? 4 **WIT:** There are cases where that's happened, yes. 5 **CAPT Neubauer:** And it's happening more frequently than in the previous years? 6 **WIT:** That is my perception, yes. 7 **CAPT Neubauer:** Thank you. At this time I'm going to ask the parties in interest if they 8 have any questions. Tote, do you have any questions? 9 **Tote Inc:** No, questions, sir. 10 **CAPT Neubauer:** ABS do you have any questions? 11 **ABS:** Yes we have some questions. Good morning Captain, my name is Jerry White, I 12 represent ABS. Based on your testimony this morning I understood that the ACP 13 program involved class societies review of the vessel as to its compliance with class rules and international standards. You indicated that the international standards 14 15 included safety regulations and conventions, is that correct? WIT: Good morning. That's partially correct. I believe that in your comments you left 16 out the supplement. So it's a three legged stool there. Its class rules, the international 17 conventions and then the supplement as well. 18
- 19 **ABS:** I described the first two legs and I was saving the third leg. But as far as the 20 supplement can you describe for the marine board what the supplement is and what it 21 advises ABS?
 - WIT: The supplement is a document that is prepared by the class societies and submitted to Coast Guard Headquarters for review and approval and it describes areas

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that are under the international conventions are left up to the satisfaction of the administration so it lays out those issues that, those interpretations or those requirements where it's not specific in the international convention, what the U.S. flag expects. In addition the supplement describes in vary levels of detail U.S. specific requirements that are not called out in class rules in the international conventions or otherwise and so these are CFR or Coast Guard Code of Federal Regulation like specific requirement regarding material, equipment, approvals or arrangements that are - where those other documents are silent on those issues. **ABS:** Would it be fair to say the supplement provides the guidance as between what the class rules say and the Code of Federal Regulations would say? **WIT:** Yes. They provide guidance for those items that aren't adequately covered by class rules, the international or the international conventions. ABS: You mentioned NVIC 2-95 and I understood from your testimony that you described NVIC 2-95 as the governing document for the administration of the ACP program, is that correct? WIT: Yes. ABS: You discussed this morning a level of oversight and you primarily testified concerning plan oversight. Based on your understanding of NVIC 2-95 can you tell me what survey oversight that the Coast Guard would administer under the ACP program? **WIT:** It's not really my position to describe that. I'm responsible for the plan review, there will be another witness that could address that question.

CAPT Neubauer: Sir, would Captain McAvoy, can he answer that question?

1 **ABS:** Can you generally tell me based on your role at OCMI what an inspection for 2 certification is? 3 WIT: Unfortunately no. I can't tell you. 4 **CAPT Neubauer:** Sir that's another question for Captain McAvoy. 5 ABS: As far as the El Faro is concerned, based on the documents that we reviewed, it looks like the El Faro entered the ACP program in 2006, correct? 6 7 WIT: That's my understanding as well. Again, Captain McAvoy would be more of the 8 authority on answering that question. 9 **ABS:** But as far as plan review or the Coast Guard's oversight of plan review you 10 mentioned the issuance of non-conformity notes or major non-conformities. Can you advise us up to the accident voyage for the El Faro, were there any non-conformity 11 12 notes or major non-conformities issued by the Coast Guard for the El Faro plans or 13 operations? 14 WIT: I can – there were, to my knowledge there were no non-conformities or major 15 non-conformities issued to the El Faro prior to the casualty. ABS: And as far as the Coast Guard's oversight are you familiar with the MISLE 16 system? Can you tell me what that is and whether that falls under your purview at 17 OCMI? 18 19 WIT: So the MISLE system is our, the Coast Guard's internal marine safety information and law enforcement database where the Coast Guard tracks information about vessel 20 21 history and records information about inspections and activities that are performed. As 22 the Commanding Officer of the Marine Safety Center we use information that's in

MISLE and we populate MISLE with information about our reviews. We upload our plan

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review letters into MISLE, but that's all I could describe about it for now. So this, again the field surveys and how field inspectors use MISLE and the information that they put in there and how they report the results, that would be better addressed to Captain McAvoy. ABS: Okay, thank you. Based on your discussion and notifications as far as notifications of plan review with regard to the Coast Guard's operational law, I understood there to be a matrix, correct? Does the matrix determine when the Coast Guard reviews specific plans for a particular vessel? WIT: Thanks. So if I understand, I'm sorry, could you repeat the question again just so I've got it? **ABS:** Sure. Earlier you discussed notifications, notifications that would go to the Coast Guard based on plans reviewed by ACS or attendance by the surveyors, you further indicated that the Coast Guard uses a certain matrix that determines a level of oversight. And my question is, based on the notifications of attendance or the notifications provided by the ACS concerned plans, how does the matrix determine when the Coast Guard is going to review a specific plan or attend the vessel? WIT: Thank you. Okay. So the, my description from earlier today and what I'll talk about again now is focused on the plan review side and the plan review targeting has nothing to do with the surveys or surveyor actions. And so those are two distinct processes and so, you know again these comments are just focused on the plan review. When the ACS notifies us that they've conducted work on our behalf, my staff is instructed to use a risk based tool to help guide their selection of plans for plan review oversight. It has no bearing on surveys that are conducted on board and the staff is

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free to deviate from the guidance in that risk based approach. So there's no hard and fast rules that they have to select a system under that program. They are free to deviate from that program and then when they do, you know when they do identify what they're going to oversee that gets communicated back to the ACS's who then submit those plans to the Marine Safety Center for review and for oversight, sorry. **ABS:** Okay. Then getting back to more specifically for the El Faro. You indicated that you were familiar with a structural lengthening of the El Faro that occurred in 1992, correct? WIT: So I'm familiar with it from the stand point of being the current Commanding Officer of the Marine Safety Center. I wasn't there at the time when that work was communicated to us. I have records at the Marine Safety Center that indicates that work was submitted to us and we took action on that work. **ABS:** And based on your position on the plan side at OCMI, can you describe for the Marine Board what a major conversion would be with respect to a vessel like the El Faro and its lengthened? WIT: Okay. So the Marine Safety Center is the Coast Guard's authority for making major conversion determinations since 1996. Prior to 1996 that authority rested with the Commandant and it was the predecessor of the office of commercial vessel compliance activities. So there's a number of different ways in which the Marine Safety Center could be involved, be requested to make a major modification or a major conversion determination. We could be, you know the field inspector or the owner operator, staff engineer or surveyor could prompt the owner to make the submission. If we are asked to make a major conversion determination then we evaluate that according to the

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criteria that are in the law. And we – then communicate our decision in writing to the submitter or the requestor. **ABS:** Okay. But just to be clear the determination as to whether it is a major modification or conversion, that decision rests with the Coast Guard, correct? WIT: It does. And since 1996 that decision has rested with the Marine Safety Center. **ABS:** And if in 1992 the vessel was lengthened and an insert or plug was put in the vessel, can you describe for this board and the public what that may mean as far as the application of the second leg of the stool, the international regulations that may apply to the insert and the rest of the vessel? WIT: Umm, I can't. I can talk about what we have in the record around that time, but in terms of the broad set of standards that would apply to that vessel at that time that's something that would require more detailed review and I'm not prepared for that. **ABS:** Okay. And just one follow up question on that. As far as the application to SOLAS to the vessel for the El Faro in 1992 based on the Coast Guard's decision to make a – to characterize it as a major modification, based on your expertise do you have an understanding as how SOLAS would apply to the safety equipment or the other equipment on the vessel? **WIT:** Well there – there are two things I think here at play in your question. First is you know what was the Coast Guard policy regarding major conversions, major modifications at the time. And then how do the regulations use this determination. And so for the first one there's a NVIC from the 1980's, early 1980's, I think it's NVIC 10-81 that describes the Coast Guard's decision making process for major conversion, major modification. And so what that NVIC states is that where a major conversion, major

modification, major conversion determination has been made then it's the entire vessel must be brought up to the current standards where it is both reasonable and practicable to do so. And so there's a – and that decision is made by the OCMI in concert with the owners and personnel involved. And so when a major modification, major conversion determination decision has been made by the Coast Guard, the second step is where's it reasonable and practicable to apply that to the vessel. And then the third step is the regulations lay out specific criteria based on a keel laid date or based on a major modification date or whatever it is and so you have to look at all those requirements and determine, you know based on this major modification or major conversion determination where it's reasonable and practicable to apply those decisions.

ABS: And in fairness Captain I understand sitting here today you don't have that specific familiarity as to how that regulation scheme would have applied to El Faro in

WIT: That's correct.

1992.

ABS: And as far as the use of open life boats on the El Faro and the application of the conventions, again you don't have a specific understanding as to how the regulations would apply to the decision in 1992 by the Coast Guard that this was a major modification?

WIT: I have not reviewed that decision.

ABS: You further indicated that you had some knowledge of some prior modifications or changes to the vessel that occurred, I believe you said in 2002, but the substance of your testimony indicated that the conversion was from a ro-ro arrangement to a lo-lo arrangement, correct?

1 WIT: Yes. We were – we have some correspondence in our file starting around 2002, I 2 don't know that those modifications, I don't think those modifications were made at that 3 time. I personally believe that they were made subsequent to that correspondence. But 4 the discussion of those modifications starts in our files around 2002. 5 **ABS:** Okay. And if I represent to you that those modifications occurred in 6 approximately 2006, would that reconcile with your understanding or refresh your 7 recollection? 8 **WIT:** That's what I think our records show that as well. 9 **ABS:** And as far as that specific conversion, you know the change in the cargo 10 arrangement, getting back to whether or not that conversion in 2006 was characterized by the Coast Guard as a major modification? Can you tell us whether it was a major 11 12 modification or not? 13 WIT: So the final decision on that particular conversion was that it was not a major 14 conversion. 15 **ABS:** Okay. But there was some dialogue between the vessel owner and the Coast Guard on that issue, are you familiar with that dialogue? 16 WIT: Again as Commanding Officer of the Marine Safety Center I have the 17 correspondence from that time period between my office and different representatives 18 19 from the owners of the vessel discussing the issue. 20 **ABS:** Okay. But sitting here today you don't have any specific understanding as to 21 whether they Coast Guard changed its position in characterizing the 2006 changes from

a major modification to something else?

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WIT: So – so my personal understanding of all of this is just reviewing the records that the Coast Guard Marine Safety Center has on it. And so when the representatives of the owners approached the Coast Guard's Marine Safety Center and asked for a major conversion determination around about the 2002 time frame, the Marine Safety Center at that time based on the facts that were presented initially determined that the conversion was going to be – met the standard and that it was in fact a major conversion. Subsequent to that decision there are at least two other letters, probably three other letters describing back and forth communications between the Marine Safety Center and various representatives of the owner regarding that determination. Regarding the Marine Safety Center's determination. And in the last letter the Marine Safety Center based on the cumulative evidence that was produced during the course of those letters makes the determination that it is in fact not a major conversion. ABS: And based on your understanding on the Coast Guard's decision that the 2006 changes were not a major modification, can you describe for the Marine Board and public what that would result in as far as the application of international regulations or rules? WIT: So the vessel was undergoing modifications you know to convert to different cargo carrying service at the time. So the Coast Guard determined that it was not a major conversion. So what does that mean then? So what it means is that modifications that are made to the vessel are, essentially fall under either, if it's new equipment it meets the newest standard, otherwise if it's replacement in kind that it can be replaced to the existing standard and if it's not part of the conversion or the modification then it doesn't need to be replaced provided that it's still serviceable and

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meets the standards that were in effect at the time that the equipment or the system was installed. **ABS:** Do you know or have an understanding as to whether there would be a cost benefit to the owner if the 2006 changes were decided by the Coast Guard not to be a major modification or conversion. WIT: So in one of the letters to the Marine Safety Center the owners argued that if this were to be a major conversion that the cost of the modifications would be an additional 7 to 8 million, or 7 to 9 million, somewhere around that range on top of the work that they were planning to do. The veracity of that estimate, the engineering details, calculations behind that estimate, the scope of work that would be done to support that estimate, all of that information is unknown. The only thing that I observed in the record was this one sentence from the owner. ABS: You further described some I guess plans that may have been submitted by the owner that the Coast Guard eventually received in May of 2014. And you described them as one line diagrams. Could you tell us or expand upon what was provided or what documents those included? **WIT:** So in May of 2014 we were notified by ABS that they had approved the P&ID plan on our behalf, a process and, I'm having a senior moment here. **ABS:** On a P&I ----**WIT:** A piping and instrument plan. So they notified us that they received, or that they had approved the plan on our behalf back in May of 2014. I don't, or I'm sorry we received that notification in May 2014. I don't know the exact date that they approved the plan on our behalf. Subsequent to that notice we also received four separate

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notices that they reviewed and approved one line diagrams on our behalf. In neither of those cases did we select the plan for oversight. So in neither of those cases did we review or conduct oversight on those plans. All we had in our records was the short narratives and the spread sheet that described what the plans were, what systems they involved, when they were approved and provided the notice to us. **ABS:** And just to recap some of the modifications that were made for the El Faro in the time frame in which they accomplished, as far as the insertion of the plug or the lengthening of the vessel in 1992, sir, that would have occurred prior to the vessel's enrollment in the ACP program, correct? WIT: That's correct. But work could be done by ABS on behalf of the Coast Guard under several different NVIC's at that time or policy documents at that time. One under 10-82 where they could have done plan review on our behalf. We know that they did stability review on our behalf at that time under 3 – NVIC 3-84. And then they could have also done load line work on our behalf under, again I apologize, but I think its NVIC 10-85. **ABS:** And with regard to that work in 1992, is it your understanding that the stability review would have been accomplished under NVIC 3-84? WIT: Yes. ABS: Okay. Would ABS withdrawn. Would the Coast Guard have received the stability documents to perform its own review if it wanted? **WIT:** I believe under the policies that existed at that time the answer is yes. Under NVIC 3-84 ABS could do the review but the Coast Guard was responsible for issuing the stability letter. So typically for that time period there would have been – the Marine

1 Safety Center would have received the documents and would have likely looked at 2 them. But I don't know the specifics on this case. 3 ABS: Okay. So sitting here today you're not aware as to whether the Coast Guard 4 specifically reviewed any of the stability documents that was submitted in connection 5 with the 1992 modification? WIT: There are letters in our record that describe and give the impression that we 6 7 reviewed those documents, but I don't have any information beyond that. 8 **ABS:** And can I ask what your impression is based on? 9 WIT: The comments in the letter that describe the work that they did. That engineers at 10 the Marine Safety Center at that time performed prior to issuing the stability letter. ABS: And as far as the changes in, I'm going to say 2006 for the cargo arrangement to 11 12 a lo-lo configuration, would the Coast Guard have the opportunity to review any stability 13 or structural information that was submitted to the ABS for approval? 14 WIT: So at that time period stability work for the vessel would have been done under 15 navigation and vessel inspection circular 3-97 and probably 3-97 change 1. And that describes the process by which the American Bureau of Shipping and other authorized 16 class societies are able to conduct the stability review and issue the full stability letter to 17 the company on our behalf. And then any oversight of that work, any Marine Safety 18 19 Center involvement in that work would have been through the oversight process that 20 was in effect at that time. But there was, unlike the earlier time period where the Coast 21 Guard was responsible for issuing the stability letter, under the revised procedures for 22 stability work done on our behalf under NVIC 3-97 the Coast Guard's not responsible for

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issuing the stability letter. All of the authority has been delegated to the class societies and so then it's just an oversight function. **ABS:** And based on your review of the file, sitting here today do you have an impression as to whether the Coast Guard performed any oversight for the 2006 stability calculations or structural [in audible]? **WIT:** I don't have anything in the file that indicates that we performed oversight. ABS: Getting back to your earlier testimony on the subject of notification, I understood from your testimony this morning that the Coast Guard would expect to receive notification of modifications to the vessel or plans that were submitted, correct? WIT: Yes. The – is this work that was done on our behalf then? Is that what you're talking about? So for work that's done on our behalf the classification society when they issue the approval, they are required by the different policies to notify us. If its work not done on our behalf then the owners or the vessels representatives would be responsible for notifying the Coast Guard Officer in Charge Marine Inspection of modifications planned for the vessel. **ABS:** Okay. And I think you further described that that notification period through corrective action has been reduced, correct? WIT: So what I talked about this morning was for work that's done on our behalf by a classification society, that period – we have over the course of the last couple years been able to reduce the time period from when that work is performed, when the plan review work is performed until when the Marine Safety Center is notified about it. And then we have been able to reduce the time frame between when we've selected

1 something for oversight and when we received it from oversight. Again these are plan 2 review specific functions. 3 ABS: Are you free to request any copies of any plans that the Coast Guard might do 4 this? 5 WIT: We are. So any of the plan review work that is done on our behalf we could 6 certainly request copies of those plans. The key issue though is you know do we know 7 that works done on our behalf. So that's where we rely on the classification societies to 8 notify us when they have done plan review work on our behalf. 9 **ABS:** Based on the Coast Guard oversight and its review of plans, you testified 10 concerning discrepancies found in 2013 and 2014. Did the Coast Guard – did the Coast Guard's review and oversight in 2013 and 2014 include any review of the other 11 12 ACS or the other classification societies? 13 WIT: Yes. The statistics that I presented accounted for all of the delegated work done on our behalf of which ABS is – does more than 90 percent, probably in excess of 95 14 15 percent of the work. ABS: As far as the problems with the automation system that led to a series of 16 issuance of discrepancies for particular vessels or a particular automated systems, 17 would that automation system have anything to do with the El Faro? 18 19 WIT: For the scenario, or for the specific example that I provided this morning it did not 20 have anything to do with the El Faro. ABS: And for the second example that you provided, I think you discussed a problem 21 22 with fire prevention whether it was a coating on a bulkhead or it was something to that

- effect, and can you tell us whether that discrepancy in fire prevention had anything to do
- with the El Faro?
- WIT: That discrepancy was a specific example that I provided, but it did not have
- 4 anything to do with El Faro.
- 5 **ABS:** So are there specific oversight procedures for the other ACS's or is there just one
- 6 oversight procedure for all ACS's?
- 7 **WIT:** There the Marine Safety Center has a single policy reference for the oversight
- of all of the ACS's. There may be some slight differences in the MOU's, the
- 9 memorandum of understanding that the Coast Guard signs with each ACS when it gives
- its delegation authority. But the general policy that's applicable to all of them for both
- plan review and survey instruction is laid out in navigation to vessel inspection circular
- 12 **2-95**.
- 13 **ABS:** Okay. But the specific oversight that you provided and the discrepancies you've
- discussed this morning, those discrepancies include a review of plans provided by the
- other ACS's?
- WIT: That's correct. The statistics that I talked about this morning with regard to plan
- 17 review oversight, in particular the statistics from the 2012 through 2014 time period
- included a discussion about multiple classification societies.
- 19 **CAPT Neubauer:** Mr. White I just want to advise you we are going to have a second
- 20 round of questioning for Captain Mauger.
- ABS: Captain Mauger thank you for your testimony this morning. And Captain
- Neubauer I have no further questions.
- 23 **CAPT Neubauer:** Does Mrs. Davidson have any questions for Captain Mauger?

1 Ms. Davidson: No, sir. **CAPT Neubauer:** Does HEC have any questions? 2 **HEC:** No questions. 3 4 CAPT Neubauer: Captain, I just had one follow up before we break for the second 5 round of questioning which will be shorter. Do you have confirmation on whether the 1992 mid-body extension was considered a major marine conversion? 6 7 WIT: I don't have anything in the Marine Safety Center that definitively states that it 8 was a major conversion. There are several discussions in the record though that imply 9 that it was a major conversion. And that was because the stability standards that were 10 applied to it were the probabilistic damage stability standards which would have come into effect because it's a major conversion. So that's the best of my recollection at this 11 12 time, but happy to turn over the records from that time. But there's no single letter in 13 our records from the major conversion determination authority at that time that says 14 definitively that it was a major conversion. 15 **CAPT Neubauer:** But Coast Guard procedures in place at the time and currently would normally require that you have a letter clarifying the conversion, is that correct? 16 **WIT:** I don't know about at the time. 17 CAPT Neubauer: How about ----18 19 **WIT:** But today, yes. **CAPT Neubauer:** And just talking about after a major conversion determination is 20 made, who is responsible for determining exactly what level of compliance the vessel 21

will be responsible for under international standards and regulations? Like who decides

1 which regulations and laws will apply to the vessel after your office makes the 2 determination? 3 WIT: So after we determine something that is a major conversion we describe the 4 follow on decisions in our letter. But they're also described in Coast Guard policy. It's 5 the OCMI that determines what standards apply to – what standards are required or 6 what parts of the vessel are required to be brought up to the current standards based on 7 whether or not it's reasonable and practicable to do so. **CAPT Neubauer:** So after a major conversion determination is made, an OCMI has full 8 9 discretion? Is that safe – is that accurate? 10 WIT: They have discretion to make determinations of where it's reasonable and practicable to bring a vessel up to current standards. 11 12 **CAPT Neubauer:** Yes, sir. At this time the hearing will recess and reconvene at 1210. The hearing recessed at 1158, 22 February 2016 13 The hearing was called to order at 1212, 22 February 2016 14 15 **CAPT Neubauer:** The hearing is now back in now back in order. Mr. Fawcett. Mr. Fawcett: Yes, sir. The next broad topic area will be the specific vessel plans for 16 the El Faro. And for this portion of the questioning I'll turn our attention to Lieutenant 17 Commander Venturella. 18 19 LCDR Venturella: Afternoon Captain. WIT: Good afternoon. 20 **LCDR Venturella:** The first question will be a slight follow up from the previous line of 21 22 questioning. Captain you had mentioned that there was a plan review school at

1 Yorktown that was previously – or partially instructed by the Marine Safety Center. 2 Does that school still exist? 3 WIT: Not to my knowledge. This was a, I was a referring to a plan review course for 4 small passenger vessels. And that course doesn't exist at Yorktown anymore to my 5 knowledge. I think we provide that support to Districts and Districts use it to, different 6 areas in the country to teach themselves. 7 **LCDR Venturella:** Captain, are you aware of any plan review schools for marine 8 inspectors? 9 WIT: No I'm not. 10 **LCDR Venturella:** Now we're going to start into the second line of questioning. And for this line of questioning Captain it will be more specific to the El Faro. And some of the 11 12 questions may be things you're not familiar with and if that's the case feel free to tell me 13 that we will move on. But I just want to see what I can get as far as your previous 14 knowledge. To your awareness Captain what vessels were considered sister vessels to 15 the El Faro for the purpose of stability? **WIT:** The Marine Safety Center's record identifies this in the discussions – in 16 discussions in different places. I don't know with any sort of specific, at this point 17 without looking at that record. I can't recall names of each of the vessels for that 18 19 specific discussion related to stability. But I know there are some comments in the 20 record about that. **LCDR Venturella:** Captain, would you say you're also not familiar with the sister 21 vessels or vessels that could require plan approval extension for things like structure 22

and electrical, any other plan reviews that might be involved?

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WIT: Yes, that's the case as well. I, you know again I think that the record has a number of discussions and by the record I mean correspondence back and forth from the Marine Safety Center at the time, lists a number of things related to sister vessels. But the specific names since these vessels change names several times throughout their history, I would hate to mention those things and get it wrong at this point. **LCDR Venturella:** Captain, we've already gone through a guite a bit of the history of the El Faro in terms of the use of the various navigation vessel inspection circulars involved in either direct Coast Guard review or authorized classification society oversight. Can you speak to the number of times that the Marine Safety Center has provided direct oversight for the El Faro related to the authorized classification society reviews? WIT: The – I don't have a number for that. The record that we have indicates several notifications throughout its history both under earlier NVIC's, NVIC 3-84 and then NVIC 3-97, then ACP. We have had some plans in the ensuing years between when the Marine Safety Center was created and when work was performed on the vessel that we had done review on the vessel, but in terms of oversight that we actually conducted on the El Faro I don't know what that number is, but it's likely to be small. As in just one or two things if that. **LCDR Venturella:** Captain, based on that testimony you mentioned earlier that no nonconformities or major non-conformities were issued in relation to the El Faro to the American Bureau of Shipping. Is it possible that the reason that there were no nonconformities or major non-conformities is that there wasn't much oversight done? **WIT:** So we can't issue a non-conformity if we don't do oversight, so yes. It's possible.

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LCDR Venturella: Captain, I would like to draw your attention to Exhibit 13. This exhibit includes correspondence between the Marine Safety Center and the representatives of Tote dated between February 1st, 2002 and November 8th, 2004. This correspondence was a discussion regarding a potential major conversion determination for El Faro. Does this correspondence look familiar? WIT: This correspondence is in the Marine Safety Center record. It seems to be a complete collection of the correspondence back and forth between the Marine Safety Center and the submitters for that time period on this issue. **LCDR Venturella:** For a quick summary for the public, this correspondence was in regard to the 2005, 2006 conversion of the El Faro from a simple roll-on roll-off to a combination roll-on roll-off, load-on load off by adding container stowage bays on the main deck and increasing its load line by about 2 feet. This was deemed not to be a major conversion by the Marine Safety Center as of the final correspondence, is that correct Captain? **WIT:** That is correct. **LCDR Venturella:** Please provide your understanding of MSC's determinations and the reason that the original decision to call this a major conversion was first upheld and then reversed? WIT: So my understanding of this issue is limited to my review of the correspondence that's before us here in Exhibit 13. I had no personal involvement at this time. And it's also based on my understanding of the Coast Guard policy that's in effect regarding major conversion determinations and how the Marine Safety Center has discharged it's duties as an organization responsible for making those decisions. The - the law

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regarding major conversions lays out four criteria for what constitutes a major conversion. But aside from that those four criteria doesn't provide any specifics for how to interpret or apply those. And so the criteria are – it uh, significant change in dimensions or carrying capacity, change in vessel type, substantially prolongs the life of the vessel or otherwise modifies the vessel to such an extent that it's essentially considered a new vessel. And so when the Marine Safety Center makes major conversion determinations it reviews the facts that are presented, or the argument that's presented in each case according to those four criteria and the law. And then we also take into account past precedents in decisions that we have made, or that the Coast Guard has made in the case of some older vessels on sister vessels undergoing similar - similar modifications, you know and of a similar design. The - I think that there's some reasons why the major conversion criteria are left to be somewhat vague. The major conversion criteria are a little bit vague because there's an issue that is tried to be balanced here. If things were so cut and dry about what constituted a major conversion then – and that threshold was very low, then there wouldn't necessarily be an incentive for owners or operators to undergo normal repair and upgrade work to fix problems that are onboard there because if they thought every time they changed out steel on board it might be considered a major conversion that would be a disincentive for them to do it. On the other hand we need to balance that with making sure that where substantial work is done or where the criteria or the law are meant more specifically that it is determined to be a major conversion and in the discussion it's all about what needs to be modified, what needs to be applied. So the letters back and forth between the owners and the Marine Safety Center at this time talk through that process and the

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weighing of those factors and evaluations. And at the end of the day it looks like by the time the 2004 letter is issued that the primary focus of discussion has been on the precedents on the fact that there was some indication that previous sister vessels that had undergone similar conversions that weren't considered to be major conversion, and so then the Marine Safety Center reversed its earlier decision. **LCDR Venturella:** Captain, could you please discuss the rational for that reversal and decision despite the large change in displacement and load line? WIT: So I can only reflect what the matter of the record reflects at this point. And so in the first letter, our February 2000 or February 20, 2002 letter we lay out the argument that, or the Marine Safety Center laid out the argument that based on the cargo carrying capacity this wasn't a, or I'm sorry this was a major conversion. And then subsequent letters between the owner and or the representatives of the owner and the Marine Safety Center review that discussion and then focus in on whether or not – on the matter of precedents and whether or not the same decision was taken on earlier vessels. And at the end of the day it seems that based what's in the record that precedents was a key determination in specifically that the fact that sister vessels to the El Faro or at that time the Northern Light had undergone a similar conversion and the Coast Guard had not considered it to be a major conversion. That seemed to be a driving factor in the discussion back and forth and maybe the reason for the reversal. **LCDR Venturella:** Captain, if you could turn to page 6 of Exhibit 13. On page 6 there's a paragraph in the middle of the letter that starts with "our intention". CAPT Neubauer: Lieutenant Commander Venturella can you give some context of what that exhibit is on the front page of the letter?

LCDR Venturella: Yes, sir. This is a letter dated March 22nd, 2004 from Totem Ocean 1 2 Trailer Express Incorporated to Captain Nash the Commanding Officer of the Marine 3 Safety Center. And it's addressing the conversion of the Great Land, Westward 4 Venture or Northern Lights to ro-ro container vessels. On page 6 there's a paragraph 5 starting with "our intention", do you see that Captain? WIT: Yes I do Commander Venturella. 6 7 **LCDR Venturella:** Within that paragraph the last sentence starts with "as I explained" 8 I'm going to start reading there. As I explained, the number of containers or ro-ro cargo 9 on the vessel has nothing to do with loading the vessel to its marks and proving the 10 stress and bending moment numbers are below the maximum allowed prior to sailing. 11 A vessel's cargo carrying capacity is defined by its load line and stability characteristics, 12 not by an FEU or TEU number count. Further, know of no international or U.S. safety or 13 environmental protection requirements that are based on TEU FEU count. To prove 14 this fact, let's load all the containers with ping pong balls. The container cubes out 15 before it weighs out. How many containers can I load on the vessel? As many as I can 16 until the vessel is down to the marks and the stability and stress characteristics are met. 17 Now load the containers with cannon balls. A container weighs out before it cubes out. 18 Therefore, where you may get 800 containers under the ping pong ball scenario you 19 may get only 400 under the cannon ball one. This is why the FEU or TEU numbers have no merit when considering capacity. On the load line is the measure of capacity. 20 21 Captain, how do you interpret that statement as far as what the letter's trying to give to 22 the Marine Safety Center in terms of intention of this conversion?

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WIT: So I think the letter was addressing comments in the Marine Safety Center's original letter of February 20th, 2002 that described that the, and the subsequent letter on 4 March 2004 that described that the Marine Safety Center's decision was based in part on this issue of substantially changes the dimensions or carrying capacity of the vessel. And the fact that they were increasing or proposing to increase the number of containers carried on board was a – was viewed by the Marine Safety Center at that time, according to their correspondence, as a substantial change to the vessel's cargo carrying capacity. In this letter Tote, in the section that you read, Tote argues that it's not just the number of boxes that are carried that changes the capacity of the vessel, but it's really the load line assignment that defines what the carrying capacity of the vessel is. **LCDR Venturella:** In regards to the El Faro Captain, when was the Marine Safety Center made aware of the increase in load line by about 2 feet going into that conversion that we're speaking of in that letter? WIT: I don't know specifically the answer to that question Commander Venturella. It was – I don't have anything in the record to indicate when we were notified or when we became aware of it. **CAPT Neubauer:** Captain I have a follow up question in regards to this paragraph. Or this section of the letter. Do you interpret that letter in your opinion to be stating that the load line will not change due to the conversion? WIT: I don't know the answer to that. It certainly – it seems like they are arguing that the load line is the defining characteristic. And there is no discussion about changing the load line at that time.

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CAPT Neubauer: Is the discussion really about changing the volume matrix arrangement stuffed in containers? WIT: That was the primary focus and again going back to the Marine Safety Center's 4 initial letter that was what they were targeting, or that was one of the key characteristics in their determination of the major conversion, was this change to the cargo carrying capacity as measured by the number of boxes that they could physically carry, not by the load line. Or not the load line assignment. **CAPT Neubauer:** Thank you for that clarification. Lieutenant Commander Venturella. LCDR Venturella: Captain, if that information was more accurately described in the letter where it said directly an increase in 2 feet in the load line would occur, would the Marine Safety Center in your estimation upheld that major conversion determination they previously made? WIT: I don't know the answer to that. The correspondence doesn't provide significant insight to that. They would have balanced that issue against determinations of prior class on other vessels, or on sister vessels undergoing similar conversions and they would have evaluated all of those things together. And to come up with their answer. So I don't know the answer to that. LCDR Venturella: Captain, if the El Faro in this circumstance had been deemed a major conversion, how would that decision be communicated to the company and the OCMI who would decide the portion of the vessel which would have had to come off the current regulatory standards? WIT: The Marine Safety Center would have issued a letter much like it did in February 20th, 2002 that states that after reviewing the facts it – they have decided that it is a

Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States. 1 major conversion and I would call your attention to the bottom paragraph of page 11 of 2 Exhibit 13. And then the – where it describes that process for making that reasonable 3 and practicable determination. So that statement goes out to our letters. In this case 4 the letter copies Headquarters office of commercial vessel compliance activities. Today 5 in this day and age it would likely copy the OCMI, it would certainly copy the OCMI if one was identified. 6 7 **LCDR Venturella:** Yes, sir, thank you. While I know that you weren't there in making 8 this determination of a major conversion so you can't speak directly on it, in your opinion 9 if a company was – why would a company not want a major conversion determination to 10 occur? WIT: So I think the answer to that question lies in one of the letters submitted to the 11 12 Marine Safety Center that we spoke about earlier today. Just give me a minute I'll take 13 a look. Okay. So the penultimate paragraph on page 3 of the Exhibit 13. 14 **CAPT Neubauer:** Captain Mauger could you give some context to that letter and then

WIT: So this is an August 4th, 2004 letter from Totem Ocean Trailer Express
Incorporated that was submitted to Captain Roy Nash, Commanding Officer of the
Marine Safety Center asking him again to reconsider, or asking Captain Nash again to
reconsider his earlier decision that this was a major conversion. And then it includes
their arguments and describes some of the add on effects of what a major conversion
determination would mean.

we'll read the paragraph you're referring to?

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CAPT Neubauer: Yes, sir. Can you read the paragraph that you feel describes the rationale that may have dissuaded them from wanting – from pursuing the major conversion. WIT: Yes. So I'm reading the second to last paragraph on page 3, again this is a letter from Totem Ocean Trailer Express Incorporated. Page 3 of Exhibit 13. And so the paragraph reads, as a side note we have been informed that if this modification is considered a major one, the cost would be 7 to 9 million on top of conversion costs. If this is true, and we believe it is, the project may not get funded and that would be injurious to our company and the maritime community in general. **CAPT Neubauer:** Thank you. Lieutenant Commander Venturella. **LCDR Venturella:** Captain, I would like to draw your attention to a different exhibit, Exhibit 14, fructose tank installation drawing. This drawing is an ABS, American Bureau of Shipping exam and drawing depicting the fructose tank installation on board El Faro that occurred between April and May 2014 in Jacksonville, Florida. This consisted of six 53 foot 18,000 gallon fructose iso tanks, two pumps, piping and support structures in holds 1 and 2 upon the tank tops. Was the Marine Safety Center, Captain made aware of the additional six 18,000 gallon fructose tanks including the fixed piping and cargo pumps on the El Faro in 2014, the one depicted in this drawing? **WIT:** So we were made aware of their work on our behalf on this drawing on May 7th, 2014. There was a – they filled out a notification in a spread sheet that describes in very broad terms the title of the drawing, the authority under which they reviewed the worked on our behalf and a few other items in that spread sheet that's listed in MTN 04-03. So that was the extent of our knowledge of the modification at that time.

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Subsequently we were notified of work to electrical, one line diagrams. I don't know what that work was. We did not select it for oversight. We did not select this drawing for oversight. We did not select the electrical one line diagrams. But the broader contexts of the modifications that were going on those would have been delegated to ABS to do that plan review on the Coast Guard's behalf. They would have been required to notify us of any other plans that were done at that time on our behalf. And we don't have any notice of any other work that was done. **LCDR Venturella:** Captain, based on the modifications depicted in this drawing where you see iso tanks with fixed piping and two pumps installed, would you typically expect the trim and stability booklet for the El Faro, the load line certification and loading computer supplement to be affected and possibly need to be revised by such a change? WIT: It's difficult to answer that questions because we don't have the details. There are specific policies out there that describe under what conditions trim and stability books need to be updated and loading conditions need to be updated. And from P&ID diagram which isn't intended to communicate that information it's difficult to make that assessment. Certainly at the time this work was going on there would have been surveyors involved on behalf - working on behalf of the Coast Guard and there would have been Coast Guard inspectors involved working on, you know carrying out our work for the certification of the vessel that might have been able to identify and clue in on this. But from this drawing it's difficult to make that judgement. **LCDR Venturella:** Captain, could you say that you believe there was a weight change involved with this modification to the vessel?

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WIT: It certainly implies that there was a weight change made to the vessel. Whether or not that weight change was sufficient to trigger the updates to the booklets, we can't determine that from this drawing. **LCDR Venturella:** Sir, if iso tanks like these are installed on a cargo vessel such as the El Faro or the El Yungue, are you aware of any Marine Safety Center policy which allows them to be included as part of the light ship or allowed treatment as a cargo loading item? Are they treated differently than if you had a non-containerized tank? And does it make a difference in that determination if they're welded to the deck with fixed piping attached? WIT: So what I would say that as in general our policies around this issue aren't so specific and there's lots of details that are left up to the matter of interpretation of the engineers involved. But that said, when equipment is physically welded to the deck and hard piped into the ship, the presumption should be that it is now part of the light ship of that vessel, the natural skeleton and weights of the vessel that are separate from the cargo carrying capacity of the vessel. LCDR Venturella: Captain, are you familiar with Marine Safety Center technical note 4-95 which is the technical note regarding weight changes and when you need to evaluate those certain weights? **WIT:** Generally familiar with that. **LCDR Venturella:** Does the 2 percent of light ship displacement rule from that marine technical note sound familiar? WIT: It does. And 2 percent refers to when you've modified a vessel either adding or subtracting weight, if it's weight that you can't mathematically or systematically account

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for its weight, it's center of gravity, then it gets lumped into the 2 percent figure when you've exceeded 2 percent of weight changes then that triggers a new stability test. Whether it's a dead weight survey incline or analysis after that. **LCDR Venturella:** Would it be within the Marine Safety Center's policy to take a change just under 2 percent like a 1.5 or 1.9 percent and neglect it as a minor change because you don't need to do any tests? WIT: I'm not sure the characterization minor change would be accurate. So we would expect that the owners, the Naval Architects, in this case classification society doing work on our behalf have traceability, accountability, for all of the weight changes. But we wouldn't expect them to require a new stability test until the aggregate weight changes exceed 2 percent. LCDR Venturella: Captain, does it surprise you to know that the trim and stability booklet for the El Faro was last updated in 2007? **WIT:** I – so I think that's a, again a difficult question to answer. We have very little information in the vessel's records at the Marine Safety Center. So to project that a vessel's trim and stability hasn't change over a 9 year period that in itself isn't surprising. When factor in modifications made to the vessel during that time period that, you know has been identified through this investigation, then that is of increase of concern. **LCDR Venturella:** Thank you Captain. Was the Marine Safety Center aware at any point of any vessel built to the same general structural plans as the El Faro as far a bottom plate scantlings and internals that buckled in service and was required by ABS to increase longitudinal strength for additional longitudinals?

WIT: I don't know that the Marine Safety Center was aware of that at the time.

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LCDR Venturella: Please turn to Exhibit 15. Exhibit 15 is a Herbert Engineering design memo dated July 3rd, 2008. It was required because of a class 1 structural failure involving of buckling of bottom plate in way of the mid-body of the Lurline a vessel now out of service. It resulted in a recommendation that longitudinal be added to the mid-body to break up the large plate panels from the transversely framed design. This vessel was a member of the PONCE class from Sun Ship Building and the design Stillwater bending moments of bottom plate scantlings and internals in the buckle region closely matched El Faro's mid-body. For the purposes of the public I want to get a couple terms that I used there so that you're aware of what I'm talking about. I used the term mid-body here to refer to sections inserted into the vessels hull at the mid-section to separately lengthen the Lurline and El Faro. I used the term longitudinal to refer to stiffen or space along the hull plates to provide longitudinal of the ship's structure. And I used the term buckling to represent a failure of the hull plate under compressed load that caused the plate to become unstable providing reduced strength plate loss or avoid carrying capacity. Also I used the term class 1 structural failure, a class 1 structural failure is during normal operating conditions either a visible through thickness fracture of any length of the outer shell where threat of pollution is a factor or a fracture or buckle which has weakened a main strength member to the extent that it compromises the vessel's ability to operate safely within design parameters. This particular incident was classified as a class 1 structural failure by ABS and the Coast Guard. When did your office get informed of that class 1 structural failure?

WIT: I don't know the answer to that.

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LCDR Venturella: Based on your experience Captain, when and how would you normally have been informed of a class 1 structural failure on a vessel in your position? **WIT:** So if this vessel was enrolled in ACP at the time, although we don't know from this memo, we would – one might infer that this is a back and forth discussion between the engineering corporation, ABS and the Coast Guard and there would have been updated plans reviewed and improved on behalf of the Coast Guard at that point. At which point we would have been notified at the Marine Safety Center and would have been part of the process of considering for oversight. Alternatively we could have been involved through – by the OCMI calling for technical support or assistance if they were looking at it. ABS: Excuse me Captain Neubauer, for the purposes of clarity on the record we would just like to lodge an objection in that the Lurline is not in fact a sister vessel of the El Faro. CAPT Neubauer: Okay. Objection is noted. The Lurline is not considered a sister to the El Faro. Do you know if it is considered a sister in regards to stability, sir? **ABS:** I defer that to the particular representatives at ABS who can address that. We can or willing from Captain Mauger what his understanding is with regard to the structure on the Lurline in comparison to the El Faro. And no they would not be sister vessels if you consider the length of the plugs or the inserts that went into the Lurline as compared to the El Faro. The thickness of the scantlings and the specific buckling calculations that would be relevant to both vessels. The difference – different lengths of the plugs, different thicknesses of plates and the calculations for stability, the

1 calculations for buckling would be different. So that's the basis for our objection 2 Captain. 3 **CAPT Neubauer:** Captain Mauger can you take that objection, the basis into account 4 as we answer these questions? 5 WIT: I can. **LCDR Venturella:** Captain, what action would normally be taken for El Faro or any 6 7 similar vessels to ensure that safety is informed of a class 1 structural failure? 8 WIT: So I think the primary action would be initiated at the Officer in Charge Marine 9 Inspection level. So under ACP if a vessel was given, or was found to have a class 1 10 structural failure one might expect the classification society to issue a condition of class. One could expect the OCMI to get involved and particularly perhaps issue outstanding 11 12 requirements of their own to it. Though they would probably work it through 13 classification society. And then as plans or modifications are made those would 14 undergo plan review and that plan review would be report to the Coast Guard's Marine 15 Safety Center. **LCDR Venturella:** Thank you Captain. Was the Marine Safety Center aware if El Faro 16 was making modification and adding equipment to the vessel for a conversion back to a 17 ro-ro service on the West Coast during the time of the casualty? 18 19 **WIT:** Not that I'm aware of that. We don't have any specific indication in our record. 20 Again we have a notification after the fructose tanks installation. The last notification we 21 have is for electrical one line diagrams. I don't have the date for that specific notification 22 with me. But that would be the only other work that we would have had reason to know 23 about at the Marine Safety Center.

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LCDR Venturella: Captain, would you expect that the American Bureau of Shipping as our delegated authorized class society be informed of these modifications under the ACP construct? WIT: Yes. **LCDR Venturella:** Captain, if there were conversions ongoing with winches and other cabling and weights added to the vessel at the time of the casualty, would a preliminary stability review be expected prior to commencing modifications and adding weight to the vessel? WIT: It depends on whether or not those projected weight changes in concert with earlier weight changes, weight modifications that had been made. You know if all that stuff – so let me rewind. So we would certainly expect that the owner operator would take into account the weight changes and do their own internal assessment of the stability and the effect of any weight changes on the stability irrespective of requirements from the Coast Guard. If the aggregate of those weight changes exceed 10 percent or exceed 2 percent, apologize, the aggregate of those weight changes exceed 2 percent then we would – then we would expect that we be notified. We would review that and a new stability test would be requested by the Marine Safety Center or the classification society acting on our behalf. **LCDR Venturella:** So in summary Captain would you say it's correct that the Marine Safety Center was unaware of modifications being done to the El Faro for this conversion to the West Coast and that if they were you would have expected weight changes to be analyzed?

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WIT: The record seems to indicate that we were unaware of the weight changes. That work would have been delegated to the classification society under 3-97 and 2-95. And they wouldn't specifically – we would have been notified through normal oversight. **ABS:** Objection. Just for the clarity of the record. Captain Venturella is referencing modifications to the fructose tanks as opposed to the major conversion. **CAPT Neubauer:** Lieutenant Commander Venturella can you clarify? It's my understanding that you are talking about the conversion from lo-lo back to ro-ro equipment, is that correct? **LCDR Venturella:** That's correct Captain. I'm no longer talking about the fructose tank installation. I'm past that topic now and I'm now onto another change to the vessel that was not analyzed by anyone. And it was the conversion of the vessel back to ro-ro by adding weight to the vessel while it was underway on several of her recent transits of the vessel prior to the casualty. **CAPT Neubauer:** Mr. White, does that satisfy your objection, sir? **ABS:** No, we would renew our objection to the extent that the Captain's already testified that he's received drawings with regard to line diagrams involving the conversion. As far as being weight changes Commander Venturella hasn't identified any specific weight changes that the Coast Guard would require to be informed. **Tote Inc:** Captain with regard, we also object to the characterization of that these were significant weight change of any kind. I think the question is leaving the impression that these were significant weight changes that really amounted to something significant to worry about.

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CAPT Neubauer: Objection is noted. Captain Mauger, if we provided you a list and a summary of the equipment that was involved with the conversion work back to ro-ro and gave you some time to review that, would that provide a better basis for you to analyze this? As either something that Marine Safety Center would need to review? **WIT:** So that would be difficult to do here in the context of this hearing. We could certainly do that for the record outside the hearing. What I was trying to articulate is irrespective of whether or not the Coast Guard knew about changes, modifications to the vessel, as an owner is considering making modifications to their vessel they have to take into account the impacts of those modifications what they might be on the stability of the vessel. And so it would be on them to review the potential impact and take into account any other weight modifications made previously that had not, or had made previously since the last stability test and then all of those modifications in aggregate would form the basis for the Coast Guard or the ACS's, the class societies decision acting on behalf of the Coast Guard in determining whether or not a new stability test would be required. So by just providing the list of the modification that in of itself wouldn't give me the ability to answer what I think Lieutenant Commander Venturella was asking. It would be what other modifications had been made since the last stability test. **CAPT Neubauer:** Thank you Captain for that clarification. I would like to ask one follow up question and then we'll take a break for a lunch. If the company made the assessment on the equipment that we talked about for the conversion back to ro-ro and they were satisfied internally that they were not exceeding the 2 percent limit, could the company proceed with the modification without notifying ABS and the Coast Guard?

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WIT: On a weight change basis they wouldn't have been required to notify the Coast Guard, but any time you're making modifications to the vessel if you're adding plating, you're changing the structure of the vessel, if you're adding electrical equipment that needs to comply with electrical standards, whatever you're modifying if those systems that are being modified are part of Coast Guard approved or classification society approved systems, then they're required to notify us. **CAPT Neubauer:** What if you were adding equipment that was previously approved under the past operations of the vessel? So you're replacing equipment in kind that previously existed, but it is an addition to what you have been approved to carry? WIT: My default expectation would be that if you're undergoing modifications to the vessel and those modifications effect approved arrangement, then you're required to notify the Coast Guard or the delegated authority acting on behalf of the Coast Guard. So I can think of a number of examples where vessels operating multiple configurations and are approved to operate in multiple configurations and we don't get involved in the review as they switch back and forth between those configurations. But in this case I don't know that same parallel exists. **CAPT Neubauer:** Was El Faro authorized to operate in multiple configurations? WIT: Not to my knowledge. **CAPT Neubauer:** At this time the hearing will recess for lunch and reconvene at 1:45 and we'll continue with questioning at that time. The hearing recessed at 1300, 22 February 2016 The hearing was called to order at 1350, 22 February 2016

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CAPT Neubauer: This hearing is now back in session. Before we begin ABS has requested an addition to docket. This is going to be, this letter is going to be Exhibit 089. It's a letter from the Coast Guard, Captain M.R. Perkins, Officer in Charge Marine Inspection, Mobile, Alabama. The letter is to Atlantic Marine Incorporated and the subject is the motor vessel Northern Lights which was subsequently named El Faro further in the vessel's career. The letter confirms that the length is dated 20 November 1992 and it confirms that the mid body extension was considered to be by the Coast Guard a major conversion. Have all the parties in interest been provided a copy of that letter? Tote Inc: Yes, sir. Ms. Davidson: Yes, sir. ABS: Yes, sir. CAPT Neubauer: Also before we commence back with testimony, Mr. White with ABS has - would like to add to the record the factual differences between the Lurline and the El Faro. Mr. White. **ABS:** Just to further clarify with regard to the reference of the Lurline and the El Faro and whether not they're sister vessels, they're not considered sister vessels for several reasons. The Lurline the insertion of the plug that was put into the vessel during lengthening was 120 feet as we see from the letter that was just identified from Captain Neubauer on the record. The El Faro was lengthened by 90 feet. Secondly the vessels have different drafts. And another significant factor was that the Lurline was a fully cellularlized container vessel. It is not a lo-lo and it does not have a ro-ro configuration.

So for that reasons for the sake of the record they are not sister vessels and completely

2 different vessels.

CAPT Neubauer: Mr. White thank you for helping us clarify on the record. Also a note

to all parties please try to speak into the microphone closer. The court reporter is

having some trouble with testimony trailing off at the end. Captain Mauger will now

reconvene, or recommence with your testimony. You're reminded that you remain

under oath from this morning.

WIT: Thank you, understood.

CAPT Neubauer: Lieutenant Commander Venturella.

LCDR Venturella: Good afternoon Captain.

WIT: Good afternoon. I would like to draw your attention to Exhibit 16, which is a correspondence from ABS to Tote dated 8 February 2008, stability review on behalf of U.S. Coast Guard NVIC 3-97, navigation to vessel inspection circular 3-97. This is correspondence indicating the review of CargoMax software for trim and stability calculations aboard El Faro. Please turn to page 2 of that exhibit and go to line item 6. Line item 6 states, we note that submittal item 1 was reviewed for the stability aspect only. If you look back to the first page you can see submittal item 1 is the CargoMax version. Captain, my question is on the El Faro there is more information available to the crew on the CargoMax software such as still water bending moments which the program checks against maximum designed still water bending moments. And it also has a damage stability section where you're able to evaluate flooding scenarios. Through the statement in this letter it's the understanding of the board that the – that ABS did not review the designed still water bending moment analysis or the flooding

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scenario analysis but just what it took to comply with the trim and stability booklet. Does the Marine Safety Center review loading computer software or just trim and stability booklets? **WIT:** Our review focuses on the issues required by the regulations. So to the specific question I don't know how we carry out the specific aspects of that review. If we review a cargo loading software just for the trim and stability information or we require separate information to be submitted. **LCDR Venturella:** Captain, do you have an opinion or educated opinion on whether your staff engineers if tasked with reviewing a CargoMax or another loading computer software whether they would be tasked with reviewing all components of the software or just the elements for compliance with the Federal Regulation? WIT: In general we would just review the elements for compliance with the Federal Regulations. **LCDR Venturella:** Thank you. I would like to draw your attention to Exhibit 8. Exhibit 8 is the trim and stability booklet for the El Faro. Please reference page 8 of the trim and stability booklet. Page 8 was routine operating instructions located within the El Faro's trim and stability booklet. I'm going to read on to the record a couple of these routine operating instructions. The first routine operating instruction number 1, excluding the fuel oil settlers, not more than one pair of tanks assigned to each type of consumable liquid on board the vessel shall be slack at any one time. Line item 3, tanks required to be ballasted with salt water shall be immediately filled and carried pressed up at all times while such ballast is necessary. When not ballasted, such tanks shall be kept pumped to minimum content at all times. Captain, my question is does the

Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

1 Marine Safety Center expect that partially filled tank limitations and other operating 2 instructions included in the trim and stability booklet be complied with at all times aboard 3 the El Faro? 4 WIT: Yes. So these operating instructions are in here because the review of the 5 system is done with some assumptions in place at the time that review is performed and 6 the vessel is found in compliance with regulations. So these operating instructions are 7 conditions that reflect the assumptions that are inherent in the regulatory review for the 8 stability. 9 **LCDR Venturella:** Captain, should the loading computer then be used a primary or as 10 a supplement to the trim and stability booklet? WIT: The – I don't have a definitive answer for that. The Coast Guard's role is in 11 12 reviewing and approving the regulatory required information. In some cases operators 13 provide additional tools to assist the crew. And I think that there's provisions, there's 14 room for that, but at the end of the day this describes what the conditions we're required 15 to meet the regulatory standards. **LCDR Venturella:** Thank you. I would like to draw your attention now to Exhibit 17. 16 Exhibit 17 is an ABS letter regarding a 2007 ABS reviewed scantling reassessment for 17 18 El Faro dated April 28, 2007. The first table on the letter shows a reduced design still 19 water bending moment and sag of 388,088 foot tons. For the public the sag is a 20 bending moment term. The second table shows reduced main deck plate scantling or thickness for newal values based on this change in designed bending moment. Do you

WIT: I do.

see that Captain?

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LCDR Venturella: Okay. Please keep this document in mind. Now turn to Exhibit 18. Exhibit 18 includes a statutory additional requirements open section. This is from the El Faro's survey status at the time of the casualty. Under that open statutory additional requirements it includes what we just saw, that reduction in design sagging still water bending moment as an unimplemented measure the other loading – manual loading program. Captain, my question is were you aware of the American Bureau of Shipping practice to allow an ocean and required designed still water bending moments to enable reduced scantlings for provision? WIT: I don't think the Marine Safety Center was made aware of this until after the casualty. Or I think the Marine Safety Center was made aware of this after the casualty. **LCDR Venturella:** Captain, is that a practice that the Coast Guard normally undertakes or is requested to review? **WIT:** So I believe what this requirement says in here is that they are required to update a portion of their or a value that's attributed to the load line and the structural analysis. And had that been tagged to additional plan review submission then the Marine Safety Center would have been aware of follow on actions taken on that through the plan review notification process talked about earlier. **LCDR Venturella:** Based on the existence of this reduced designed sagging still water bending moment, do you think it would have been the right review decision to implement an allowance like that in the loading program and review that portion of the loading program or the loading manual? WIT: I don't know at this time because we haven't reviewed this.

1 **LCDR Venturella:** Captain, I – just to refresh your memory, we previously spoke of 2 CargoMax loading software on the vessel on El Faro. And that particular aspect, the 3 bending moments was not part of the review. So it's just something in context for your 4 understanding. Does that change anything for you? 5 **CAPT Neubauer:** Do you remember that conversation Captain? 6 **WIT:** So the conversation from earlier in the hearing? 7 **CAPT Neubauer:** Yes, sir. Are you referring to a conversation from earlier in the 8 hearing Lieutenant Commander Venturella? Or is this a conversation that occurred 9 elsewhere? 10 **LCDR Venturella:** Um previously I referred to Exhibit 16, which was the CargoMax review letter. And in that we highlighted that it was reviewed for the stability aspect 11 12 only. Meaning that any strength of loading components of that program would not have 13 been reviewed by ABS. So with this statutory additional requirement in mind that 14 designed still water bending moments are being modified in order to allow reduced 15 scantlings or thicknesses of plate, I was just asking would it have made since to review that component of the loading software? 16 WIT: And I guess Commander Venturella, my answer's in the context of the Marine 17 18 Safety Center. We didn't carry out this work so I think that question would be best 19 asked to the folks that carried out this work on our behalf. 20 **LCDR Venturella:** Thank you. Sir, the Coast Guard, American Bureau of Shipping had 21 a – you have a memorandum of understanding between the two organizations. And 22 within that memorandum there's a statement, the Coast Guard will accept the review 23 and approval of vessels plans by the American Bureau of Shipping in the same manner

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as if approved by the Coast Guard. In your opinion does this generally mean that ABS technical is expected to review plans in the same manner as the Coast Guard Marine Safety Center? **WIT:** So I think the memorandum of understanding was getting at a different issue. I think it was as OCMI were issuing certificates to vessels that they are to give the plan review conducted by the authorized class societies the same weight as if it had been performed by the Coast Guard and the Coast Guard Marine Safety Center. So I think that MOU doesn't get at that specific issue of do we both carry out our work in the exact same way. I think though that there are other aspects of our delegated functions that require the classification societies to discharge their duties in a manner similar to us reviewing classification, reviewing compliance with international standards, reviewing compliance with the supplement and do so in a manner that is equivalent or similar to the way we would do things. **LCDR Venturella:** Is there anything else about the delegation program Captain that you think is worth noting in this interview? WIT: We spent a lot of time on the delegation discussion this morning and it's an important topic because as I highlighted during my comments the Coast Guard has become very reliant on the use of third parties, the Marine Safety Center in particular. And so as I mentioned we've provided increased focus on aspects of it. We know that there is still gaps that need to be addressed. We talked about the accountability issues associated with how do we ensure that those working on our behalf, how do we truly hold them accountable for the work that they do. Especially when recognizing that this

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work is part of the income generating portion of their business. So I think that we've covered those topics already in my testimony. So I have nothing further to add to that. LCDR Venturella: Thank you Captain. Captain, could you please refer to Exhibit 13 again? Exhibit 13 is a major conversion letters again. If you could let's first refer to page 5. Captain, I was wondering do you see the vessel Lurline on the list of vessels being asked to consider as a comparison for the major conversion determination? WIT: So this is a memo from Totem Ocean Trailer Express Incorporated dated March 22nd, 2004 to Captain Nash, Commanding Officer of the Marine Safety Center and it's in the context of requesting reconsideration as earlier determination that the, then North Lights was undergoing a major conversion. And so you mentioned the SS Lurline, the SS Lurline is highlighted in the bottom \(\frac{1}{4} \) of the page there with the ship name and some remarks next to it. **LCDR Venturella:** So on this letter it was one that they asked for consideration for comparison purposes to hear a major conversion determination on the El Faro? WIT: It definitely appears that way. The preceding paragraph says the following is a list of each of the Sun Ships built PONCE class vessels with remarks on the conversions that have taken place that were not considered major conversion. And then it describe. 2, 4, 6 vessels including the Lurline with some remarks about each of the vessels. **LCDR Venturella:** All right, sir. Could you now shift to page 2 of the same exhibit? Page 2 is another letter from Tote, this one dated August 9, 2004. WIT: Yes, sir. LCDR Venturella: Do you see the Lurline listed on this letter as a comparison for a major conversion?

1 WIT: It appears that it's in the first line of the table, although it's not clear because it 2 could be a typo. It says Lunline instead of Lurline. 3 LCDR Venturella: Yes, sir. So ----4 **ABS:** Just as a point of clarification, are we going through these exhibits with regard to 5 the Lurline to pick out that it was used as a reference or are you suggesting this is the 6 vessels? 7 **CAPT Neubauer:** Sir, the line of questioning is to establish whether Totem referenced the Lurline to influence not having to do a major conversion for that purpose. 8 9 **ABS:** Okay. Because there's no reference to sister vessels in this correspondence, is 10 that correct? **CAPT Neubauer:** Lieutenant Commander Venturella? 11 12 **LCDR Venturella:** That's correct, there's no reference to sister vessel in these letters. 13 **ABS:** Thank you. 14 **LCDR Venturella:** It's just to make the point on comparison. So Captain, back to the 15 guestioning on these letters, would you agree based on the use of the Lurline in both of these letters that it was the intention of Tote to consider these vessels as similar at the 16 least? 17 WIT: Certainly, again my role in this has been to review the correspondence that 18 19 existed, I didn't have a role in the generation of the correspondence or the original 20 review that this refers to. But what I would like to do is in response to your question 21 note the last paragraph on page 2 from this August 4, 2004 letter from Totem Ocean

Trailer Express which states, I believe these are the figures that Mr. Hagarety

requested. For context Mr. Hagarety was the Marine Safety Center's oversight

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- *Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.*
- coordinator at the time. And then the paragraph goes on, it should also be noted that
- 2 hulls 662, which in the table above is indicated SS Lunline, and 664, which in the table
- above is indicated SS Matsonia were sister ships to hull 670 prior to the conversion and
- 4 currently are arranged as seen in enclosure 4.
- 5 **LCDR Venturella:** Thank you. Captain, for reference hull 670 is that the El Faro?
- 6 **WIT:** That I don't know off the top of my head. I would refer you to enclosure 2, the
- description of enclosure 2 on page 2 on that same exhibit where it says Sun Hull 670 is
- 8 modified general arrangement, 1252-700-101, revision A1 SS Northern Lights.
- 9 **LCDR Venturella:** For the record the Northern Lights was the El Faro's previous
- name?
- 11 **WIT:** That's my understanding, yes.
- 12 **LCDR Venturella:** Okay. No further questions. Thank you.
- 13 **CAPT Neubauer:** Mr. Roth-Roffy.
- Mr. Roth-Roffy: Thank you Captain. I would ask Mr. Young to ask his guestions first.
- 15 **Mr. Young:** Thank you Captain. I just had one question. Resulting from the extensive
- layup of El Faro in 2013, did MSC receive any notifications to make any determination
- that any updates were required in the vessel?
- WIT: I do not believe that we did. I don't have anything in our record to indicate that we
- made any determinations or were requested to make any determinations.
- 20 **Mr. Young:** Thank you.
- Mr. Roth-Roffy: Thank you Captain. No further questions for me.
- 22 **CAPT Neubauer:** Does Tote have any questions?
- 23 **Tote Inc:** No questions, sir.

- 1 **CAPT Neubauer:** Does ABS have any questions?
- 2 ABS: Yes we do. Captain, if I could refer your attention to Exhibit 18. Exhibit 18 is an
- 3 ABS survey manager survey status, correct?
- 4 **WIT:** I don't know. That's what the name of the title is, but it's not a Coast Guard
- 5 Marine Safety Center document.
- 6 **ABS:** You responded to certain questions earlier this afternoon with regard to that
- 7 document on mainly the item 901 concerning the bending moments, correct?
- 8 WIT: Yes.
- 9 **ABS:** Before arriving today had you ever reviewed that document?
- 10 **WIT:** I have not.
- 11 **ABS:** And as far as your training and I know you have vast responsibilities within the
- 12 Coast Guard and uniquely you're in charge of, but do you have any specific training in
- 13 stability?
- 14 **WIT:** I do have some specific training in stability and have conducted stability reviews
- for U.S. flagged vessels as a staff engineer at the Marine Safety Center.
- ABS: So do you have an understanding what a still water bending moment is?
- 17 **WIT:** I do.
- ABS: And to the extent that there is a still water bending moment for hogging or a
- sagging condition, do you know whether the El Faro exceeded either of those still water
- 20 bending moments when it departed Jacksonville on its last voyage?
- 21 **WIT:** I do not.

- any civil or administrative proceeding, other than an administrative proceeding initiated by the United States. 1 **ABS:** And have you reviewed any of the Herbert Engineering or stowage plans from 2 the El Faro lost voyage for stability and the still water bending moments were 3 described? 4 WIT: I have not. 5 **ABS:** So sitting here today you have no personal knowledge or any understanding 6 based on the documents you reviewed whether the El Faro exceeded or violated any 7 still water bending moment descriptions on this last voyage, correct? 8 **WIT:** That's correct, I do not have that knowledge. 9 **ABS:** And if I represented – did you have an understanding as to whether in a normal
- 10 loading condition whether the El Faro would be in a hogging or sagging condition? WIT: I don't have a direct personal understanding, or I don't have direct personal 11 12 knowledge of whether El Faro was normally hogging or sagging.
- **ABS:** But do you have an understanding what hogging or sagging is from a stability 13 14 description?
- 15 WIT: I do.

- **ABS:** Did you have an understanding, aside from this suggestion from the Marine 16 17 Board that there was any relationship between the still water bending moment, or siding and comment 901 on Exhibit 18 and in the lower section of the document in item 897. 18 19 In 897 had to do with ECDIS. Let me withdraw the question. Did you have an 20 understanding as to whether item 901 the still water bending moments had any 21 relationship to the reassessment that was given to the vessel?
 - WIT: I'm not even sure what reassessment you're referring to.

- ABS: Turn to Exhibit 17 please. Before arriving today had you ever reviewed Exhibit
- 2 17 having to do with the reassessment?
- 3 **WIT:** I had not.
- 4 **ABS:** And sitting here today you have no understanding as to what a reassessment is
- 5 under class rules?
- 6 **WIT:** I have a general understanding of what a reassessment is under class rules.
- 7 **ABS:** Could you share with us what your general understanding is?
- 8 **WIT:** Yes. The what I understand as I sit here and look at this document, this to me
- 9 is that the original design scantlings for the vessel were based on some calculations
- that determined an excessive an acceptable stress limit in order to stay in compliance
- with classification and regulatory rules. And what this document does is it looks at
- basically the ASDO or current condition based on wastage or corrosion or modifications
- that have been made and lowers the allowable maximum stress limits that the vessel
- should be can face in normal conditions.
- 15 **ABS:** And those reassessments were given in accordance with submissions based on
- demonstration of strength or gauges correct?
- 17 **WIT:** I don't know how that process works.
- ABS: You were asked about Exhibit 16 which was a letter on the CargoMax. Did the
- 19 Coast Guard provide any oversight over the CargoMax program?
- WIT: I don't have anything in the Marine Safety Center's record to reflect that we
- selected or oversighted the CargoMax loading software.
- 22 **ABS:** And based on the regulations applicable to this vessel, do you have an
- understanding as to whether a loading manual was even required?

- WIT: I don't specifically know the answer to that question. I know that they are required
- 2 to have a trim and stability booklet.
- 3 **ABS:** With regard to your earlier testimony concerning buckling calculations, have you
- 4 reviewed or are you familiar with any buckling calculations that were performed on any
- 5 vessel?
- 6 **WIT:** No I'm not.
- 7 ABS: Captain, Neubauer I have one question on an earlier topic concerning the 38
- 8 percent figure. And if it's okay with the board I would ask that question.
- 9 **CAPT Neubauer:** Yes, sir.
- ABS: Concerning the 38 percent discrepancy figure you relied it for 2014 Captain?
- 11 Would it be possible to break it down as far as what those discrepancies were
- concerning structural review, machinery review, piping review, electrical review,
- automation, stability and load line, safety related, or tonnage? Would you have those
- figures at your disposal?
- WIT: We could provide. I don't have those figures with me today, we could provide that
- to the MBI if desired.
- ABS: You were also asked about a class 1 structural failure on the Lurline, correct?
- 18 **WIT:** I was, yes.
- 19 **ABS:** And the class 1 structural failure that, that classification that's a Coast Guard
- classification, correct? That's not a class 1 description is not an ABS description,
- 21 correct?
- WIT: That was my understanding based on the way that the question was asked that it
- was referred to as a Coast Guard uh.

- Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States. 1 ABS: So whether it was – whether the Coast Guard considered the Lurline to have a 2 class 1 structural failure was based on whatever Coast Guard criteria that was followed. 3 correct? 4 WIT: Again, I think that's the way the question was phrased. I don't have any direct 5 knowledge of the Coast Guard actions with regard – or Coast Guard involvement with 6 regard to the load line. 7 **ABS:** Thanks Captain Mauger. I have no further questions. **CAPT Neubauer:** Thank you, sir. In regards to the 38 percent breakdown, do you 8 9 want that added as an Exhibit? 10 **ABS:** That would be helpful, yes. CAPT Neubauer: We'll compile that data and have it added as an exhibit later in the 11 12 proceedings. Are there any further questions for Captain Mauger? Tote Inc: No, sir. 13 **CAPT Neubauer:** Commander Denning?
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CDR Denning: Captain, back to the class 1 structural failure on the Lurline, when you answered Lieutenant Commander Venturella's question as far as follow on actions that would be taken for that type of issue you spoke of actions at the OCMI level and authorized classification society in terms of conditions of class. Are there any other Coast Guard policies or procedures as far as the Coast Guard conducting a review of the plans for that particular vessel? Or, actually let me back up. Was your answer strictly in regards to the particular vessel at hand or an entire class of vessels? WIT: My answer focused on the vessel at hand. And I described the role of the OCMI because in this case I've got nothing in my record to indicate that we were notified or we

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were involved in the discussion on that. With that said I didn't specifically look to see if we were involved in a discussion on the Lurline. **CDR Denning:** So let me frame my question. Not particular – not particularly referring to the Lurline incident, on any class 1 structural failure of any vessel if it were to happen today, the procedure you described, actions that would be taken at the OCMI level, action that would be taken at the classification society level. My question is what actions would the Coast Guard take besides the OCMI level? In other words is there any action that would be taken in terms of plan review at MSC? WIT: I would expect that if there was a class 1 structural vessel on a U.S. inspected vessel that some actions would be taken by the Marine Safety Center in either directly contributing to the review or in the case of a – work that was done on our behalf and oversighting that review. CDR Denning: So is that answer in regards to this specific vessel or a class of vessels? WIT: In general. The answer's just in general. So I don't know what the number of class 1 structural failures we have on an annual basis in the U.S. inspected fleet. But I believe it to be a very small number. And so it's something that would generate attention and may cause our involvement. Or we may be involved. **CDR Denning:** So just, I'll ask a very specific question then. Are you aware of procedures at Marine Safety Center that would require an entire class of vessels to be the plan review, you know we spoke in terms earlier in the line of questioning about percentages that are actually reviewed. Would a class 1 structural failure cause the

- 1 Marine Safety Center to review an entire class of vessels if it was noticed on one
- 2 vessel?
- WIT: It's hard to answer that question in the abstract. I don't know of any specific
- 4 policies that we've written on that. But I would be happy to consult with a Naval
- 5 Architect or take that question back for one of our Naval Architects or structural folks to
- find out the details. So I would expect though that if we found a problem or if we were
- 7 made aware of a problem on a single vessel that we would review to see what the
- 8 extent was on other vessels. And although I can't think of any examples where we've
- 9 done that with class 1 structural failures, there are examples where we have identified
- other problems on a single vessel and have expanded the scope to look to see if that
- problem exists on other vessels in that class. It's a general principle of approach.
- 12 **CDR Denning:** Understand, sir. Thank you.
- 13 **CAPT Neubauer:** During the last round of questioning I skipped over asking Mrs.
- Davidson if there were any questions.
- 15 **Ms. Davidson:** No questions.
- 16 **CAPT Neubauer:** Does HEC have any questions?
- 17 **HEC:** No questions.
- 18 **CAPT Neubauer:** Are there any final questions for Captain Mauger before we recess?
- 19 **Tote Inc:** No, sir.
- 20 **ABS:** No, sir.
- 21 **CAPT Neubauer:** Yes, sir. Mr. Roth-Roffy.
- Mr. Roth-Roffy: Tom Roth-Roffy, NTSB. Good afternoon, sir.
- 23 **WIT:** Good afternoon.

- 1 Mr. Roth-Roffy: Just one guick guestion. Regarding your sampling for review of plans
- 2 approved by ABS on your behalf, I believe you mentioned about 4 percent or as may as
- 6 percent, is that consistent with your belief what is a reasonable sampling for this sort
- 4 of an oversight role?
- 5 **WIT:** We have Commandant policy that set a target of 10 percent oversight for plan
- review and for survey back in the 1980's. We've never hit that target that I'm aware of
- at the Marine Safety Center. I think that when we look at a small percentage and find
- 8 errors it's hard to sit here and say that that's an acceptable level of oversight.
- 9 **Mr. Roth-Roffy:** So at this time, sir, in your view does the MSC have adequate
- resources, staff and funds to properly carry out their mission in this area of ACP
- 11 oversight?
- WIT: We have a broad range of responsibilities and we apply those resources using
- our risk based decision making approach to the best of our ability to address those
- responsibilities. If we had additional resources we would use that to expand our
- oversight. We would use it to provide better or more frequent support to the field. We
- would use it for those functions.
- 17 **Mr. Roth-Roffy:** Thank you, sir. That's all I have.
- 18 **CAPT Neubauer:** Are there any final questions for Captain Mauger?
- 19 **Tote Inc:** No, sir.
- 20 **ABS:** No, sir.
- 21 **Ms. Davidson:** No, sir.
- HEC: No, sir.

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CAPT Neubauer: Captain Mauger, if you could have your staff just compile just a general breakdown of the 2014 deficiencies, the 38 percentile in just general categories we would like that exhibit for consideration by the board. **WIT:** We'll make that available to you, thank you. **CAPT Neubauer:** Thank you, sir. Captain Mauger, you are now released as a witness at this Marine Board Investigation. Thank you for your testimony and cooperation. If I later determine that this board needs additional information from you I will contact you through your counsel. If you have any questions about this investigation you may contact the Marine Board Recorder, Lieutenant Commander Damian Yemma. Thank you for your testimony, sir. **WIT:** Thank you. **CAPT Neubauer:** The board will recess and reconvene at 2:45. The hearing recessed at 1434, 22 February 2016 The hearing was called to order at 1447, 22 February 2016 **CAPT Neubauer:** This hearing is now back in session. At this time we will hear testimony from Captain Kyle McAvoy, Chief of the Office of commercial vessel compliance at Coast Guard Headquarters. Captain McAvoy please come forward to the witness table and Lieutenant Commander Yemma will administer your oath and ask you some preliminary questions. **LCDR Yemma:** Raise your right hand, sir.. A false statement given to an agency of the United States is punishable by a fine and or imprisonment under 18 United States Code section 1001 and might also subject you to discipline under the code of military justice,

- knowing this do you solemnly swear that the testimony you're about to give will be the
- truth, the whole truth and nothing but the truth, so help you God?
- 3 **WIT:** I do.
- 4 **LCDR Yemma:** Thank you, sir. You can be seated please. Captain please start by
- stating your full name and spelling your last name for the record.
- 6 **WIT:** Sure. My full name is Kyle Patrick McAvoy, spelling of the last name is M-C-A-V-
- 7 O-Y.
- 8 **LCDR Yemma:** Thank you. And counsel could we also get you to state your name and
- 9 spell your last for the record again please.
- 10 **Counsel:** Lieutenant Jeffery Travis Noyes, last name N-O-Y-E-S.
- LCDR Yemma: And Captain what is your current position with the Coast Guard?
- WIT: I'm currently the Office Chief for the Coast Guard Headquarters office of
- 13 commercial vessel compliance policy.
- LCDR Yemma: And what are some of your general responsibilities in that position?
- WIT: Within that position I am responsible for generating the policy that field inspectors
- use to inspect or examine commercial ships and or commercial rigs.
- 17 **LCDR Yemma:** Can you also describe generally please some of your prior
- assignments or work experience that are relevant to your current position?
- 19 **WIT:** Sure. Commissioned in 2, excuse me, commissioned in 1990. First duty station
- was at Marine Safety Office Baltimore. I was a marine inspector and a casualty
- 21 investigator at Baltimore. From Baltimore I went to the Eighth District Coast Guard staff
- in New Orleans where I was a staff officer in the marine safety division. From the
- marine safety division at District Eight I went to MSO, Marine Safety Office of New

- Orleans where I was a marine inspector. From Marine Safety Office New Orleans in
- 2 1998 I went to graduate school at the University of Michigan. After Michigan I was a
- branch chief and then a division chief at the Marine Safety Center. And then in 2004 to
- 4 2008 I was the Chief of Prevention at Sector Delaware Bay in Philadelphia. From 2000
- 5 and, well after that I went to be a traveling marine inspector out of Coast Guard
- 6 Headquarters. That was 2012 to 20, excuse me, 2008 to 2012. And then from 2012 to
- 7 today I'm the Office Chief of commercial vessel compliance.
- 8 **LCDR Yemma:** Thank you. And can I ask you to please move the microphone a little
- 9 closer to make sure we're picking up on audio.
- 10 **WIT:** Sure. Is that better?
- LCDR Yemma: Yes, thank you, sir. Can you also please state your highest level of
- 12 education completed?
- 13 WIT: I have two Master's degrees, one in Naval Architecture and marine engineering
- and another in manufacturing engineering, both from the University of Michigan.
- LCDR Yemma: And do you hold any licenses or professional certifications?
- 16 **WIT:** I have an EIT for the State of Virginia.
- 17 **LCDR Yemma:** I'm sorry, EIT?
- WIT: Engineering training, it's a precursor to a professional engineer's exam.
- 19 **LCDR Yemma:** Thank you, sir. The board will have some questions for you.
- 20 **WIT:** Sure.
- 21 **CAPT Neubauer:** Good afternoon Captain McAvoy. The board is interested in the
- 22 effectiveness of the alternate compliance program, because the El Faro was enrolled in
- that program. I understand that many of the issues that we're going to cover today

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1 include a time frame well before you tenure as Office Chief of commercial vessel 2 compliance. And I appreciate you coming to help us understand the program better. At 3 this time, Mr. Fawcett will start – will open the line of questioning. 4 Mr. Fawcett: Good afternoon Captain McAvoy. 5 WIT: Good afternoon. Mr. Fawcett: We'll generally explore two broad areas of topics. The first will be the 6 7 Coast Guard alternate compliance program. And then some general inspection policy. 8 The second area will be covering some facets of the safety management system policy. 9 So you've been able to observe the way the questioning take place. The Coast Guard 10 will ask some questions followed by the National Transportation Safety Board, followed by the parties in interest and then we'll move on to the next topic. So if there is any time 11 you would like to take a break please let us know. And as I've stated before most 12 13 people they're listening in, don't understand the Coast Guard use of acronyms, so if you 14 could be as clear and concise and in plain language as possible that would be very 15 helpful. WIT: Sure. 16 Mr. Fawcett: So the first area we would like to talk about is the Coast Guard alternate 17 compliance program and some general questions related to them. And you talked a 18 19 little bit about your background. Could you elaborate a little more on the specific 20 training that relates to your duties in your present job? **WIT:** Sure. I think that – before I answer your question, sir, I also just briefly extend my 21 condolences to the family and friends of everybody on the El Faro. The maritime 22

community is a small community and we've all known people that were associated with

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that have been affected, so my condolences to friends and family. Back to your question, sir. The position that I'm in is a position that is a combination of experience, I do not believe there is a quote unquote prerequisite to be in my – in the position I am in as the Office Chief. So you asked what specific training I had for the job and I think it's the combination of experience gathered from 20 plus years doing marine inspections. Mr. Fawcett: And I don't know if I caught it, but did you graduate from the Coast Guard Academy or Maritime Academy? WIT: I did not. I graduated from a State school in Western New York. Mr. Fawcett: Thank you, sir. So to help us understand the working structure of where you work. Using your organizational title, not the person's name, but who do you work for directly? WIT: I work for the Director of Prevention and Compliance. That's a fellow Captain. And that is one of three Directors who report to the Assistant Commandant for prevention policy. Mr. Fawcett: So if you would help us understand how your office, you know how it's divided and then generally speaking using the organizational title explain who heads up the various divisions or offices? **WIT:** Okay. So the Assistant Commandant for prevention policy reports to the Deputy Commandant of operations, or the Deputy of the Deputy Commandant of operations who work two steps below the Commandant. Commandant, Vice Commandant, Deputy Commandant of Operations. So then there's currently one star Admiral that is the Chief of – excuse me, the Assistant Commandant for prevention policy. Under – in that position the Assistant Commandant for prevention policy has three directorates. One is

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waterways management, one is standards, the development of standards, and the third is prevention and comp – or excuse inspection and compliance. So I work directly for the person in charge, the Director of Inspection and Compliance and then I am one of 4 - 5 office, well hold on. I'm one of 5 Office Chiefs that report to the Director of Inspection and Compliance. Mr. Fawcett: And then who works directly for you in terms of the structure that works directly for you? WIT: I have 4 divisions that work for me. The first division is called commercial vessel compliance, we use the acronym CVC, CVC1. CVC1 handles inspection policy for domestic vessels, U.S. flagged. CVC2 deals with port state control, examination policies as well as off shore, mobile off shore unit and floating off shore facility installation policies and the examinations and inspections that go with them. The third division governs fishing vessel policies. And the fourth division handles merchant mariner credential policies. Mr. Fawcett: So taking a ship like the El Faro, which of the particular offices would be responsible for a ship such as that? WIT: So the policies that would apply to the marine inspectors in the field, since the El Faro was a U.S. flagged vessel, the division that would generate the polices that our marine inspectors would use would come out of CVC1. Mr. Fawcett: So out in the field are Sectors required to identify and set up an alternate compliance policy officer?

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WIT: If they have an alternate compliance program fleet then yes. But not every Sector is a coastal Sector that would have a domestic flag where we have a domestic fleet that would use an ACP program. Mr. Fawcett: So in the very briefest of ways in explaining it, can you explain how a vessel is accepted into the alternate compliance program? WIT: Yes. So a vessel owner or operator would – that elects to use the alternate compliance program would file an application for inspection through the Officer in Charge Marine Inspection and that individual staff, which are normally referred to as inspection bullpens or inspection office, and on that application for inspection would indicate that they desire to enter the ACP program. Through – in the process of entering the ACP program there's Commandant policy that governs various steps, meetings that would take place to ensure that the vessel can enter into the program prior to a, either a hand off survey or initial survey. So there's going to be a slight difference as to whether this is a new construction project or whether it is entering the program after being inspected by the Coast Guard for some time. Through that there's Commandant policies and set up of meetings and various different scenarios can take place. Ultimately leading to acceptance into the alternate compliance program. Mr. Fawcett: So circling back to those coastal Sectors that actually have people designated to be inspectors with alternate compliance program backgrounds. Is there any qualification for those individuals? WIT: So each – each inspection bullpen or staff that would have vessels in the alternate compliance program, per Commandant policy is required to have an ACP officer. Normally that's going to be an officer inspector on staff with some seniority or

- some experience that has led them to hold that position and relate to the classification
- 2 society representatives and the owners and operators. And help govern the COI
- issuing process for that vessel. So if your direct question is, is there a qualifying
- 4 process to be the ACP office the answer is no. The decision is left to the Chief of the
- 5 inspection department or inspection division under the Officer in Charge Marine
- 6 Inspection to determine who that officer on staff would be.
- 7 **Mr. Fawcett:** And you used the term COI. Could explain what that is?
- 8 **WIT:** A COI is a certificate of inspection which is issued to a vessel once the
- 9 inspections, whether in the ACP program or otherwise have been carried out and the
- vessel has been certified as fit for the intended route of service. So COI is just the
- abbreviation for certificate of inspection. Which is a Coast Guard issued document.
- 12 **Mr. Fawcett:** Thank you, sir.
- 13 **WIT:** You're welcome.
- Mr. Fawcett: My final question before I pass it on, is the ACP, the alternate compliance
- program a voluntary program or an elective program?
- 16 **WIT:** Both. It's elective as a voluntary program.
- Mr. Fawcett: Okay. So a vessel operator has a decision whether they choose the
- 18 Coast Guard inspection program or the alternate compliance program, is that correct?
- 19 **WIT:** Oh I see. I think, sorry about that. It is a voluntary program. And yes it's an
- alternative voluntary program. It's an alternative way to meet the conditions and criteria
- that would establish a vessel's fit for route service.
- Mr. Fawcett: Thank you, sir. I'll pass the line of questioning to Commander Odom.
- 23 **CDR Odom:** Good afternoon Captain.

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WIT: Good afternoon. Sir, with regards to the authorized class society once a vessel is - goes through the process to get approved to be in the alternate compliance program, is that company's authorized class society obligated or required to take on the vessel under the alternate compliance program? **WIT:** I'm sorry. Can you repeat the question? **CDR Odom:** Once an owner get approval from the Coast Guard to enter the program are the authorized class societies required to honor that and take them on and survey them under the alternate compliance program? **WIT:** So an owner with a vessel that wants to apply for the ACP program is probably going to bring an authorized class society rep into the equation or into the discussions while applying for that vessel to be in the ACP program. So they'll already have an ACS at the table so to speak. **CDR Odom:** So once the authorized class society accepts the vessel and takes in on under the alternate compliance program, what authorities does it extend to the alternate compliance program to survey the vessel? **WIT:** So an authorized classification society to be accepted into the alternative compliance program is governed by regulations in 46 C.F.R. Part VIII. And so a classification society has many different criteria they have to meet in order to be an ACP classification society. And then be able to carry out those functions assigned or delegated to the ACP, the authorized classification society that would in fact be an ACP member or element.

1 CDR Odom: So once in the system does an authorized class society have the 2 authority to discontinue the program for the vessel and send it back to the Coast Guard 3 for a regular certification for inspection? 4 WIT: There are processes in place where an authorized classifications society or ACS 5 in the course of doing their delegated surveys and meeting the statutory elements of the 6 delegated surveys, if certain things are noted and revealed where problems are 7 discussed that classification society does have an option to recommend to the OCMI 8 that a vessel be dis-enrolled from the ACP program. 9 CDR Odom: Can you briefly describe the difference between an authorized class 10 society under 46 Code of Federal Regulations and a recognized organization under 33 C.F.R Part 96? 11 12 WIT: Yes. Generally a recognized classification society has a set of criteria that they 13 must meet to – it's like – so a recognized classification society is the first step before 14 becoming an authorized classification society. That's the easiest way to think of it. So 15 you have to be recognized before you can be an ACS, alternative class, ACS. The criteria that govern whether you are in as, whether a class society becomes a 16 recognized classification society is covered in, as you mentioned 33 C.F.R and then to 17 become an authorized classification society there's additional criteria in 46 C.F.R. 18 19 **CDR Odom:** So generally within in terms of calling a recognized organization they 20 issue the statutory documents for the safety management system, is that correct? 21 WIT: There's provision – so are you referring to a vessel that is a U.S. flag vessel and in the ACP program? 22 23 CDR Odom: Yes, sir. Like the El Faro.

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WIT: Okay. So there is potential for a vessel to be classed by one classification society but yet its ISM certification be governed by a separate class. CDR Odom: So essentially the safety management system could be under one organization and the vessel's statutory compliance could be under a different one. Does that present any type of complications or challenges for the way the vessels are regulated? WIT: It can. So what you may have at that point is recognizing that to a certain extent all of the classifications societies have a fleet of vessels they are responsible for and different set – some slight variations in their class society rules may lead an owner or operator of the vessel to choose one class over another. You have situations where you have potentially one classification society looking at another classification societies work. Sometimes there might be some proprietary issues there but I'm not certain on that. The statutes and the ISM code itself go into rules and regulations that govern that when data has to be turned over, data has to be turned over and dealt with for the good of you know the verification of the rules and the safety provisions. But you do have a potential there for some reluctance to turn over information sometimes. **CDR Odom:** Once a vessel is accepted in the alternate compliance program, how is it regulated differently from a certificate of inspection? What changes for the vessel as far as what rules and regulations they have to comply with? WIT: So in general the alternate compliance program, and I heard my colleague Captain Mauger talk to some of this, a vessel is in the alternative compliance program has to comply with that classification society's class rules, the IMO conventions and then something that called the supplement. The supplement is a document or a series

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of documents based on how that class is set up. That outline, those requirements that the Coast Guard in this case or the flag state wants to see dealt with or representative, or verify compliance with during the inspection cycle that are not fully articulated in either the class rules or the IMO documentation, IMO conventions. So it's the three legged stool that was referred to this morning. So once a vessel in the ACP program, class surveyors are delegated stat – you know the ability to carry out statutory surveys that meet the statutory obligation of complying with that three legged stool, those three sets of rules, IMO convention requirements, class rules and the endorsement. So in that regard the classification society surveyor is doing all of those surveys and the Coast Guard goes and oversees that at various points and time and in various ways. So in a nutshell the difference is therefore, that your class society is doing the lion share of the hard surveys and the Coast Guard to oversee a lot of that work. Or portions of that work at various times and for various reasons. So that's the major difference. **CDR Odom:** Thank you. So speaking of the supplement, can you kind explain from a policy perspective what your role in the supplement, or managing the supplement if any? **WIT:** So the supplements are developed by a separate office, or the supplement is developed by a classification society and then acceptance of that supplement is worked through a separate office at Coast Guard Headquarters. My office does not approve supplements. CDR Odom: Would you be able to answer how often the supplements are required to be updated or revised?

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WIT: Off the top of my head I don't know. I want to say as a guess, I would want to say every year, but I would have to look that up to give a specific answer. **CDR Odom:** Thank you. So between the supplement, the international regulations and the class rules it's widely stated that that's considered to be an equivalent to the United States Code of Federal Regulations. Can you explain what it means to be equivalent and how those equivalencies are kind of determined, who determines the equivalencies? WIT: Sure. The equivalency is in regard to the minimum standards that a vessel needs to meet to ensure that compliance with those minimum standards would ensure its fit for route in service. And in the case of ACP it would be internationally, international travel, or international water, ocean going. **CDR Odom:** For example, to give you a specific example like a boiler on a steam ship which the Coast Guard requires every 5 years. But not necessarily required by class rules. How would you consider that an equivalency or how is that determined? WIT: So I think it's important to take a step back and say when the ACP program was developed in the mid 90's a lot of these discussions were – there was a series meetings and discussions to determine what the U.S. Coast Guard at the time as the flag state found to be an acceptable set of standards that would satisfy the flag state, in this case the Coast Guard's obligation to verify such that that vessel met those standards and it was fit for route of service, fit for route intended service. The - it's not a one for one necessarily. In that if there is a C.F.R. regulation that you would mimic exactly in the class rules or in a IMO convention regulation, there's a bit of governance that says okay the Coast Guard is satisfied with, if vessel's showing compliance with all these things as

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being fit for route of service. But that is the whole reason why the supplement came about. Because if you compared the class rules and the IMO convention regulations exclusively to the C.F.R.'s there was a gap. And that's where the idea of the supplement was created. The supplement covers that gap of other regulations that the Coast Guard's concerned about to ensure that vessel is fit for route in service. CDR Odom: Thank you. Once the El Faro was surveyed under the alternate compliance program the Coast Guard does an oversight exam on it annually, is that correct? WIT: Yes, sir. **CDR Odom:** So with that annual exam the designated ACP officer at the Sector or the MSU would have access to the authorized class society's database, is that correct? **WIT:** That is correct. Every – every marine inspection bullpen has access to the database. It's a requirement of being an ACP society that you give the Coast Guard access to the database that tracks specifics of the vessel. CDR Odom: And can you describe the scope of an oversight exam that a marine inspector would do on a vessel like the El Faro? **WIT:** Sure. And there's a couple different oversight methodologies that might happen. The most basic and the most primary would be in the course of a COI exam. So a Coast Guard team of inspectors would come on board a vessel such as the El Faro. Do an exam that includes checks of all the documents, all the paperwork, included deck walk through, engineering space walk through. It would include checking any outstanding conditions of class, any observances that were noted when the inspection team looked at the records as they prepare to do the exam. They are going to look at

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the manning documents. They're going to do some drills. The general idea is outlined in Commandant policies that the performance of the mariners and how they - the crew operationally works is a little more in line with Coast Guard responsibilities and that is always looked into during that COI exam. Traditionally at the end of that exam the certification inspection, the COI will be endorsed and issued to the vessel. **CDR Odom:** Sir, you mentioned a machinery space walk through. Can you give us an example of what a walk through would entail? Would that require the testing from the machinery under the alternate compliance program? WIT: It could. It very easily could. So each inspection staff has – they have the authority to expand the exam. Let me back up, I'll use a different word. To sample parts of equipment or machinery that they think needs to be sampled. And if it includes an operational test they have the authority to do that. So how would they come to the actual conclusion, what would they come to want to test? If they in doing their research prior to the examination find that there's been some problems in let's say the emergency generator over the last couple years they may want to do some black out test or simulate some test that will trip the emergency generator online. If there's been steering problems or boiler problems as you as you mentioned, if during the course of their oversight exam or annual exam they have the authority and the responsibility to look at those things in a little more focus if you will to ensure that things are in compliance with rules and regulations. If during the course of that exam they find they are not then they can go further, they can expand the exam and start to have a much deeper dialogue, most likely with the classification society surveyors that were also that had certified that equipment and figure out a way forward either for bringing that

- piece of equipment into compliance or perhaps putting a requirement on vessel through
- a condition of class or a no sail item or you know there's many different tools in the
- 3 toolbox for that.
- 4 **CDR Odom:** Thank you Captain. Essentially if a Coast Guard marine inspector wanted
- to go on board and walk through the machinery space and not test anything would they
- still be in compliance with the oversight exam requirements? Is there a mandatory
- 7 requirement for them to test machinery? If the vessel has a good history, they don't see
- 8 anything wrong, could they walk through it and not test anything?
- 9 **WIT:** Technically yes.
- 10 **CDR Odom:** So under the alternate compliance program if Tote had a marine casualty,
- a compliance deficiency or it was issued a major non-conformity, how would the
- communication between who would Tote be required to notify and who would the
- authorized class society be required to notify? How does everything get communicated
- whenever a situation like that happens?
- 15 **CAPT Neubauer:** For the record is that a hypothetical question?
- 16 **CDR Odom:** It, it not really. I mean if there's a marine casualty what's the notification
- process under the alternate compliance program.
- 18 **CAPT Neubauer:** Okay. I just wanted to make sure you're not referring to any specific
- incident.
- 20 **CDR Odom:** No nothing specific. It is just from the policy part of it, how would that
- 21 work?
- WIT: Okay. So forcing function in this case would be a marine casualty. A reportable
- 23 marine casualty?

1 CDR Odom: Yes, sir. 2 WIT: Okay. The responsible for a reportable marine casualty still comes back to the 3 owner and operator of the vessel to report it to the Coast Guard. 4 CDR Odom: So also if a major non-conformity was identified by an authorized class 5 society who would be required to notify the Coast Guard? 6 WIT: So now we're talking about a major non-conformity not associated with a 7 casualty? 8 CDR Odom: Yes, sir. 9 WIT: Okay. If a major non-conformity is discovered during a survey or a surveyor sees 10 things that lead him or her to believe that the vessel has things within their safety management system that are not up to speed there are mechanisms to report that to 11 12 the Coast Guard. If in fact it's a major non-conformity it's required to be reported back 13 to the Officer in Charge Marine Inspection. And that will also work its way up to my 14 office, commercial vessel compliance staff at Headquarters. 15 **CDR Odom:** What about just a regular deficiency, how are those communicated between the owner, the authorized class society, and Coast Guard? During a – if a 16 survey is taking place and they identify a regular deficiency, do they have an obligation, 17 18 either party alternate – under the alternate compliance program to notify the Coast 19 Guard of those deficiencies or is it up to the Coast Guard to go into the authorized class 20 database and review those deficiencies? WIT: The – I would have to check with the actual specific language. But in practice 21 what's going to happen is that, that data is going to be revealed to the Coast Guard 22

Officer, OCMI staff. So for some of your minor deficiencies that were perhaps fixed on

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the spot I don't know of the reporting requirement, you know and the time line of the reporting requirement. But the Coast Guard does have access to the entire database which would document the results of those surveys, the class surveys. **CDR Odom:** Now flipping that around if the Coast Guard was on board doing their oversight examination and identified a deficiency and wrote a Coast Guard 835 to the owners of the vessel, how would that cleared up to the Coast Guard and authorized class society to clear that deficiency? WIT: So for the Coast Guard inspector to be on board and issue an actual 835 a couple of other steps have not been able to be taken. So usually the first step would be to notify class and if class is on board during the actual survey or the exam you can enter a dialogue at that point and see where it goes. An 835 would be issued if class is not available to issue a condition of class or to take it on as some sort of criteria for their survey. And 835 could also be issued if there is a repeating element to a discrepancy that think needs to get raised to the next level. Generally once an 835 is issued the class is completely brought in and they have to document that within their database. **CDR Odom:** Does an authorized class society that's recognized by the Commandant of the Coast Guard have to meet any quality standard and maintain that quality standard while they're recognized by the Commandant? WIT: They do. **CDR Odom:** Can you give us an example of what that would be? WIT: So there's some ISO standards, I think it's ANSY [sic], it's 46 C.F.R. Part VIII, some quality standards that a classification society has to meet. I think it's in 46 C.F.R. Part 8.230. And there's the authorized classification society has to have certification

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within those – within a quality program or system. In practice the way it is currently working is that all of the ACP societies that the Coast Guard recognizes are also members of the international IACS, international association of classification societies. And IACS has its own quality system where they used credited certification bodies to verify that you know all the IACS members have those quality systems in place. **CDR Odom:** Can you discuss some of the policies that are under review with respect to the alternate compliance program and some of the changes that are being considered? WIT: Sure. So as a – as we – as the Coast Guard looks forward towards how to ensure compliance with - how to ensure vessel compliance with various sets of rules and regulations, and bear in mind that other fleets are coming into the inspection world such as towing vessels, the Coast Guard has recognized that we have a heavy reliance on third party work and we will likely need to continue that. To do that some of the efforts ongoing are working towards how do we train our marine inspectors to be auditors and overseers. Currently we train most of our marine inspectors to learn the systems of the ships, learn the basics of how to ensure a vessel complies with the rules and regulations, but becoming an auditor or an overseer of another party doing that is a bit of a different skill set that takes a little more experience. So we're in the process of trying to figure out how we are going to train them into that next level of oversight management. So that's one thing. Another thing that we're doing, we are looking at the ACP NVIC, NVIC 3-95 to try to clarify the expectations and the roles of our marine inspectors as well the ACP societies. So that we can do the oversight more efficiently, get better documentation and eventually be able to set up a better risk base - risk

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based process for figuring out how we're going to check on vessels to ensure compliance. **CDR Odom:** And so outside of the annual oversight examination, what type of monitoring does the Coast Guard do with regard to vessels in the program and the health of those vessels? Is anyone nationally reviewing the number of deficiencies issued over a period of time to the vessels? WIT: Yes. So in 2012 the - my office took on some efforts to improve our oversight of deficiencies and monitoring of ACP vessels in a new way. One of the reasons that we had to do that is because we had a position which was called the, the acronym was the LORAX which stands for the liaison, I can't recall what it is off the top of my head. **CDR Odom:** Liaison Officer for the authorized class society. WIT: Yes, that's it. Liaison Officer for the authorized classification society. That position was eliminated in 2012 and as a result of that the responsibility for understanding the job that that position did tracking of databases, working with classification societies and what not had to be inherited or distributed amongst the staff at Coast Guard Headquarters, the remaining staff. Through that we had some sharp folks and they developed a protocol for collecting data from the class societies on a more routine basis which was used to feed a matrix, a risk ranked matrix of what we thought were the vessels that needed to be look at a little more closely. So that's one way. Also through that process extra dialogue was needed with the classification societies and the ACP officers and designated points of contact within the ACP societies to ensure – and almost on a daily basis to ensure that the Coast Guard was

getting information about a vessel that may have a certificate that's either expiring or a

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survey that's overdue or if a PR 17 was issue or a major non-conformity was issued and through that dialogue with the class societies and through to the, my staff at Coast Guard Headquarters, information came in more on a daily, weekly basis and then my staff would turn around and make each unit know of, or advise each unit hey I've got this piece of information regarding this vessel or that vessel. It's in your AOR, the area of response and leave it to the OCMI staff as to what their action would or would not be. CDR Odom: So whenever you notice one of these trends of increased deficiencies or information through your matrix does it change the profile on how we regulate the vessel? Does it mean increased visits or anything like that? If the OCMI decides to do nothing with that information is that an option or does it officially kind of change things? WIT: Again Commander it's a lot of case by case, it can. And specifically if we start to see the same vessel occur within these notifications, you know there might be a few phone calls or emails to a unit or there could in fact be a – it could in fact be a mandate to the class society that they conduct an internal quality audit to, you know from my office we have in fact said we would like you class society X, Y, or Z to conduct an internal audit to ensure that your quality systems are in fact doing what they are supposed to do. From there that would be a preliminary stepping stone. There's tools that can go beyond that where we could look towards many vessels that are experiencing problems and direct a company audit or a dock audit. You know companies that own ships have a document of compliance which is their ISM tool that gets checked upon and then ships have a safety management certificate. So depending on the situation, case by case, there's tools that my office, me and my office can dictate for action to the field. Or take action to make rules.

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CDR Odom: Was the El Faro a vessel that your office was looking at prior to the casualty? WIT: The El Faro came up in our 2015, excuse me, it came up in our targeting list that we issued in October of 2015. So backing up a little bit and going back to the great staff I had in 2012 that developed and improved the reporting criteria and the relationship with the class, they developed this targeting list. Which is based on class input, Coast Guard input and some other sources and it's ranked order – and then it's ranked ordered and you know run through a what we call a cube in our MISLE system to determine, you know of those vessels in the ACP fleet these – this 10 percent show the most potential for being at risk. And then we det – dictate through a message out to the field that, we call it the targeting list, OCMI staff are to conduct a periodic oversight review of that vessel, examination of that vessel. So the El Faro came up on the 20, the message that we were issuing in October of 2015 with the intent that an OCMI staff if the El Faro came into a U.S. port the OCMI staff at that port would look at the El Faro with a periodic reexamination. CAPT Neubauer: Can I make a note for the record, sir? Are you saying that the El Faro was published on the targeting message the same day that it sank on October 1st, 2015? WIT: No. So once we learned of the casualty and the tragedy of the El Faro going down my staff was in the process of getting that message ready to release. I think we were within days of releasing it if not the very next day. And the question became internally, you know well what do we do now? We just lost – we just lost the El Faro potentially. Because you now it took 3 or 4 days for hurricane to subside for folks to get

- in, you know our SAR folks to get in and see what was going on. So there was a lot of
- 2 unknowns in that period so we held the message and we didn't release it. And then
- once we learned that the El Faro had in fact sunk we did release the message and we
- 4 left the El Faro on the message just with the asterisk that unfortunately the vessel was
- 5 not in service.
- 6 **CAPT Neubauer:** Thank you Captain. Commander Odom.
- 7 **CDR Odom:** So would you open to Exhibit 84 please, page 6. The Exhibit is a Federal
- 8 Register. It was published prior to the alternate compliance program regulations.
- 9 **WIT:** Okay.
- 10 **CDR Odom:** Page 6. It should be in the lower right hand corner for the page in the red.
- Left hand column about half way down it states that, Coast Guard oversight will ensure
- that the vessel participating in the ACP do not experience degradation in the level of
- safety demonstrated by comparable vessels that continue to be inspected by Coast
- Guard regulations. Would you speak to that a little bit and explain to us today if you feel
- that is the case with the age of the fleet and all of the other factors? And tell me if you
- feel like that is in fact is?
- 17 **Tote Inc:** Sir, can you point that paragraph out again? Which paragraph?
- 18 **CDR Odom:** Page 6, it's on the left hand column. It is the first paragraph that begins
- with to, but all the way at the bottom of the paragraph.
- 20 **CAPT Neubauer:** Commander Odom can you read the title of that and give some
- context to what you're referring to?
- 22 **CDR Odom:** This is Federal Register Volume 61, number 250, rules and regulations
- for the Coast Guard.

CAPT Neubauer: Is there a date? Is there a date on that?

CDR Odom: December 27th, 1996.

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WIT: So the intent there is – it goes back to the fact that the ACP is an alternate program. It gets into the fact that our senior leaders at the time decided and worked through the fact – the concept of equivalency which we talked about. Equivalency being the C.F.R., a C.F.R. based exam is equivalent to an ACP exam where the ACP exam used the IMO convention, used the supplement and you used the classification society rules. And through the tools set up for oversight and the tools set up to potentially disenroll a vessel from the ACP or to have extra SMC audits or DOC audits and even on a more international scale that the audits that I have staff that perform at corporate offices of ACP societies, all those tools are driven at the methodology that we do use to ensure that vessel's participating and the ACP do not experience any degradation in the level of safety demonstrated by comparable vessels that continue to be inspected by the Coast Guard. So as a frame work I think that the frame work is there. The execution of that frame work can become difficult. And even if we were to say that tomorrow the ACP program shall cease and all vessels will go back to a full inspection cycle by Coast Guard marine inspectors, resources aside, because as Captain Mauger – Captain Mauger has mentioned we have come to rely heavily on the ACP program, even if you could wave a magic wand and have all the resources we need, the skill set of the inspectors in the field would also still – would also need to be improved in order to fully ensure the same level of safety. So I guess what I'm saying is that in some regards having classification societies as deeply involved as they are, the Coast Guard gains

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other benefits in that for the Coast Guard to develop a cadre of marine inspectors to that level is no easy task. And it's been ongoing for – it would take some time. **CAPT Neubauer:** I have a follow up question on that. Sir, do you believe that since the Coast Guard inspectors are not conducting the majority of the detail inspections, does that lead you to the conclusion that you just made that we lose some expertise on how to conduct and oversee those inspections? WIT: It's a challenge. So it's a challenge to maintain the skill set of an inspector to the level – to that level. So the opportunities for as many inspections, and let's be honest, the U.S. fleet is not as robust as it once was through the 80's and 70's as well. So the opportunity to practice the skills of being a marine inspector aren't as abundant as they used to be. **CAPT Neubauer:** In your opinion do OCMI's push their inspectors to go above the minimum and maintain those spills – those skills by mirroring ABS surveyors during inspections? **WIT:** So the marine inspection qualification program has changed since when the ACP program was first developed. So in 2008 we developed a concept, I think it was 2008, the Coast Guard developed a concept of, or developed this concept called the feeder port. A feeder port is a Coast Guard unit that has the opportunity to help – a feeder port is a unit that has the opportunity for marine inspectors to learn the craft of inspection on various types of vessels. Some feeder ports have an abundance of tankers while some feeder ports may have more of an abundance of a cruise ship for example. So what inspection skills you would learn at a different feeder port is going to vary to some degree. Once the feeder port was established policy also had to be put into place that

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helped revitalize or retool the inspection qualification process. For example down in the Gulf of Mexico if you're an inspector at Marine Safety Unit Houma or Morgan City you're going to be learning all about off shore supply vessels. The training, and I'll add one more thing then I'll kind of try to wrap that all together. When we established these feeder ports we also established a position called the Marine Inspection Training Office, or the MITO. So a marine inspector will go to a various feeder port as his – his or her first tour into the marine inspection world. Be tasked with curriculum and specific programs designed to teach that person how to be a marine inspector for that style of vessel and that person will be governed by the marine inspector – marine inspector training officer as well as the chief of the inspection division. All of that feeds to how we train inspectors today. Back when this was developed it was a different program where you went to a port for two years in one of four places. So the answer to your question isn't as direct as I would like it to be because the systems have changed. **CAPT Neubauer:** Yes, sir. But and Captain I have a follow up question, information you just provided. So under the feeder port concept are Coast Guard inspectors conducting enough inspections, especially deep draft, to obtain their qualifications as designed and is the system providing enough journeyman inspectors with those qualifications at the next follow up billet as designed by the feeder ports? WIT: So the system is designed well, but we are struggling with journeyman that can oversee and mentor those young apprentice marine inspectors into fully appreciating the depth of what inspection is all about.

CAPT Neubauer: Can you give some context to struggling, what that means?

WIT: So we have units where and I can't recall specifically the ratio, there's a recommended ratio of, a journeyman marine inspector and an apprentice marine inspector for the purpose of the board I'll explain them quickly. An apprentice marine inspector is a young officer that gets their orders to their first Sector or feeder port to enter – to learn the vocation of being a marine inspector. An apparent – that's an apprentice marine inspector, AMI. A JMI is once that marine inspector quote unquote graduates from the feeder port after a three year tour they're required to get four basic level quals, or four quals. And then they are termed journeyman marine inspector. But one thing that is very important to ensuring that the AMI's can get the – can get the oversight, mentoring, role model ability that they need is a sufficient supply of JMI's, or journeyman marine inspectors that have been doing it longer that the AMI's can learn from, can ask questions and what not. And there's a ratio, I think it's a 5 to 1 ratio where for every 5 AMI's you should have one JMI, and we're not meeting that at all of our Sectors, at all of our feeder ports.

- **CAPT Neubauer:** Do you know what the ratio is approximately?
- **WIT:** Currently?
- **CAPT Neubauer:** Yes, sir.
- WIT: I would have to pull it up. We can provide that. I don't have it off the top of my
- 19 head.

- **CAPT Neubauer:** But you're sure it's well above 5 to 1?
- 21 WIT: Let me make sure I understand your question. So are you asking what the ratio is
- at the various feeder ports currently on the deck plates?
- **CAPT Neubauer:** Yes, sir.

- WIT: Some may be within tolerance, some may have the right ratio, some do not. I
- would have to check.
- 3 **CAPT Neubauer:** Thank you Captain. Captain, I would like to explore another issue
- 4 that you mentioned. In 2008 there were some changes made to the Marine Safety
- 5 program. Those changes were done under the Marine Safety Enhancement Plan. Are
- 6 you familiar with that plan, sir?
- 7 **WIT:** I am.
- 8 **CAPT Neubauer:** Part of that plan recognized the need for specialized inspection
- 9 expertise in certain types of vessels, does that sound familiar?
- 10 **WIT:** Correct, right.
- 11 **CAPT Neubauer:** Do you remember a segment of that plan creating centers of
- expertise to address that specialty deficiency?
- 13 **WIT:** I do.
- 14 **CAPT Neubauer:** And could you do you remember what centers of expertise were
- created by the plan after 2008?
- WIT: I think there were seven. There was the outer continental shelf National Center of
- 17 Expertise. There was the investigation National Center of Expertise. There was the
- towing vessel National Center of Expertise. There was the gas carrier National Center
- of Expertise. There was the vintage vessel National Center of Expertise. Cruise ship
- National Center of Expertise and I'm missing one.
- 21 **CAPT Neubauer:** I think you missed the investigations.
- WIT: Oh sorry Captain Neubauer, the investigation National Center of Expertise.

1 **CAPT Neubauer:** Captain, I would like to get back to the vintage vessel center of 2 expertise. That – can you explain what a vintage vessel is to the Coast Guard? 3 WIT: I don't recall the formal definition off the top of my head or if we had a formal 4 definition. It was established in the Great Lakes, vintage vessel NCOE and the subject 5 matter that it was designed to handle were some of our older ships that might have 6 rivets such as lakers. Would still have steam propulsion systems, a lot of lakers and 7 many ocean going international trade vessels still. But the vessels, and then there's 8 some historic vessels that are specifically called out in statute as needing to be 9 examined or inspected, but don't have as rigorous inspection subchapter for verification. 10 So the vintage vessel National Center of Expertise was designed to look into those 11 types of systems and elements on vessels that the average marine inspector wouldn't 12 see in today's fleet. 13 **CAPT Neubauer:** Would you consider a steam propulsion plant to qualify, on an older 14 vessel to qualify as something that vintage vessel – vintage center of expertise was 15 designed to address? **WIT:** Yes, that was one of their areas of focus was steam propulsion. 16 **CAPT Neubauer:** Was the vintage vessel center of expertise established? 17 WIT: It was. 18 19 **CAPT Neubauer:** Can you talk about what happened to the unit? 20 WIT: It was – it was disbanded or it was decommissioned, and I don't remember 21 exactly when. Maybe around 2012, 2013. I would have to check. **CAPT Neubauer:** But more than a couple years ago? 22

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WIT: Yes.

- 1 **CAPT Neubauer:** At this time I'm going to give the questioning back to Commander
- 2 Odom.
- 3 CDR Odom: Thank you Captain. Real quick I would like to look at Exhibit 84 one more
- 4 time and have you read something out of that. Same page, page 6.
- 5 **WIT:** Same column?
- 6 **CDR Odom:** Second column, would be the second paragraph, the eighth line. It starts
- with the Coast Guard recognizes the need to, would you please read that part of the
- 8 paragraph?
- 9 **WIT:** I'm sorry where are you?
- 10 **CDR Odom:** Second column, second paragraph.
- WIT: The Coast Guard recognizes the need to maintain the technical expertise of those
- individuals who will be charged with performing this oversight role, its marine inspectors.
- 13 **CDR Odom:** Next sentence.
- 14 **WIT:** The Coast Guard will maintain its capabilities to perform all of the functions it now
- performs related to vessel inspection certification. In addition to certification of U.S.
- flagged vessels, marine inspectors with technical expertise are also currently required
- for an effective port state control program.
- 18 **CDR Odom:** That's good. So would you, based on the comments that you made with
- the Captain in his line of questioning would you say that we today have maintained that
- 20 level of technical expertise required in the Federal Register?
- WIT: I would say that we're struggling with that, but I would also add that the makeup of
- the various fleets we inspect have also changed. I mean when you consider that this
- was 1996 and then you look at what's going on with some of the complexity in vessels

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that are in working in the energy sector, using the word maintain becomes a difficult word because in reality we have to grow into new environments and complexities to ensure that we maintain proficiencies and gain new proficiencies. So the face of the fleet so to speak has changed somewhat. But in general even considering that I think we are struggling to maintain and to grow to those areas of inspection. **CDR Odom:** Turning your attention back to the program and the vessels in the program, has the Coast Guard ever removed a vessel from the alternate compliance program that you're aware of? **WIT:** Has the Coast Guard ever involuntarily removed a vessel from the ACP program? CDR Odom: Yes, sir. **WIT:** The answer is no. **CAPT Neubauer:** Is that over the 20 plus year history of alternate compliance? WIT: I believe so. There have however been four vessels that have voluntarily withdrawn from the ACP program. **CAPT Neubauer:** During Captain Mauger's testimony he mentioned that involuntary, or removal by the Coast Guard from the ACP program would be the ultimate in accountability. Do you agree with that assessment, sir? WIT: I think when you get to the point of a vessel that is being considered to be disenrolled or that voluntarily dis-enrolls, there's a lot of things that need to be considered and looked at. So removing a vessel or helping a vessel to voluntarily dis-enroll is a measure of accountability. But there's other measures of accountability beyond the consequences to the vessel itself that should be considered. So with regard to your

- specific question is to the ultimate method of accountability, I'm not sure. I think there's
- 2 other actions that need to be taken.
- 3 **CAPT Neubauer:** But over the course of the 20 year history there have to be a least a
- 4 hand full of vessels that were not compliant with the program. Would you say that those
- 5 vessels then voluntarily dis-enrolled, is that?
- 6 **WIT:** Yes, the four. I have -- I'm aware of four vessels that voluntarily dis-enrolled.
- 7 **CAPT Neubauer:** Sir, thank you Captain.
- 8 **CDR Odom:** Can you give us an example of what a voluntary dis-enrollment is or why
- 9 somebody would voluntarily dis-enroll? Why would lead to that point that they would do
- 10 that?
- WIT: So issues with the vessel that have become repetitive in nature and led to
- ineffective have led to an assessment that the vessel is not effectively managing its
- safety management safety management system. One of the advantages to a vessel
- voluntarily dis-enrolling is there's a lesser sit out time before the vessel is eligible to
- reenter into the ACP program. So it is possible that a vessel could see the fact coming
- that they're about to be dis-enrolled involuntarily and chose to voluntarily dis-enroll.
- 17 **CDR Odom:** So essentially they jumped out ahead of the Coast Guard and left the
- 18 program?
- 19 **WIT:** Yes.
- 20 **CAPT Neubauer:** Is it the four vessels that voluntarily dis-enrolled, were those
- vessels allowed to come back in eventually?
- WIT: I can't recall the exact histories of them, some of the names have changed. One
- 23 I'm sure was did not come back, it was scrapped.

1 CAPT Neubauer: Yes, sir. 2 **CDR Odom:** So in those four that dis-enrolled, I know there are many factors, but is 3 the age of the vessel one of the factors that play into that? 4 WIT: I don't know if you can make that specific of a statement Commander. There's 5 vessels on the lakes that are 100 years old that still operate it well. So age is a factor, 6 but I don't feel comfortable saying that age is a sole factor. 7 **CDR Odom:** Shifting gears a little bit back to the authorized class societies. Whenever a company selects an authorized class society, earlier you said there's many of them. 8 9 Is there competition between the societies to get these vessels under their society? 10 **WIT:** I would imagine there's some element of competition. **CDR Odom:** So a company like Tote hires ABS to be their authorized class society, 11 12 they pay the surveyors to come out and survey their vessel for compliance, is that correct? 13 WIT: Correct. 14 15 **CDR Odom:** So if the vessel was certificated by the Coast Guard, how do they pay the Coast Guard for their inspections? 16 WIT: It's usually through a program, called user P program, it's a user fee that's 17 established in the C.F.R.'s. 18 19 **CDR Odom:** So with that there's a kind of customer service customer dynamic

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between the owner of the vessel and the authorized class society surveyors. Do you

think that has an effect on how these vessels get surveyed since they're being

essentially paid by the company?

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WIT: That's a great question and I think the answer perhaps and even likely. However, that's why the mechanisms of oversight are designed the way they are to try to ensure that doesn't become an issue. **CDR Odom:** So those mechanisms of oversight for an authorized class society acting on behalf of the Coast Guard, how do we conduct oversight activity directly on ACS? WIT: So it happens at many different levels. As I mentioned I have a member of staff that goes to corporate ACP offices and ACS offices and observes audits at that level. In those situations the class, for the interest of the – excuse me, for the purpose of those authorized classification societies that the Coast Guard works with they're all IAC's members. So IAC's has its own process of mandating that – the authorized class society carries out an audit and hires an accredited certification body to do that audit. So we have staff, or I have staff that would go and observe those audits on an international level. Whether it be to observe the corporate office of DNV, which register ABS, what have you. So there's one layer of auditing that occurs. Stepping down to regional offices for ACS's we also will observe audits from either Coast Guard Headquarters, staff would go and observe an audit that occurs at a regional office. And or sometimes our travel marine inspection staff may participate in some of those and or if there is a local command they may be invited to participate as well. And then working right on down to the more specific offices in geographic localities whether it be a principle surveyors office or an audit that happens there, then local OCMI staff are usually advised of that and invited to attend if they want to observe that audit. So that's kind of one layer of how the auditing program works. The other layers include when we have marine inspectors go out on the ships themselves to do the annual exams we

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already discussed. When they are doing that they are – it's an audit, they are checking on things and doing deck walks, testing machinery if needed or if they've decided to set that up in advance based on review of the vessel's history. So that's another layer of the oversight that occurs. A third layer of oversight that occurs is when we utilize the targeting list. Which is established through many sources of input that go into how we generate that list. **CDR Odom:** So when a member of your staff goes to an authorized class society at the national level or that higher third party we come take sample of that authorized class society oversight, under their class they have many vessels of many flags? WIT: Correct. **CDR Odom:** So when that auditor selects the sample and our person over there for oversight, they might witness the auditing of a vessel that's not even a U.S. flagged vessel, and not necessarily an ACP vessel, is that correct? WIT: Sure, that is possible. Generally what will happen is in advance of that audit or my staff member going to witness that audit he will give that classification society or that accredited certification body whoever is going to do the audit, give some of the names of U.S. vessels so that they can be sampled through the audit process. **CDR Odom:** Is there any feedback from that process to your office? When they go audit and go out and do oversight? WIT: Yes. Usually a copy of the audit is provided or the Coast Guard could request a copy of that audit and the member that goes to observe usually drafts a trip report. CDR Odom: I would like to talk a little bit about existing vessels and we heard in earlier

testimony commonly referred to grandfathering. Can you explain to us from a policy

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perspective the situations where a vessel an existing vessel and its equipment are allowed to remain grandfathered under old regulations and some circumstances where that existing vessel status might be lost? WIT: Usually it's a function of the reg or the rule or the IMO convention. So in statute so, U.S. statute, so when the law is passed or the reg is developed it's usually very specific as to whether a vessel has to be phased into comply with a certain requirement or whether or not it would be allowed to maintain the system as existing. CDR Odom: Thank you. One other question then I'll turn it over for the board to ask questions. El Faro had 6 Polish non-mariner maintenance personnel assisting with the retro fit of the vessel. For non-mariners who routinely ride ships at sea for extended periods of time, is there a regulation or a policy to require any kind of basic off shore survival training to better prepare them for emergencies like El Faro? CAPT Neubauer: Captain, before you answer I want to make a correction on the record there were 5 Polish ----**CDR Odom:** Sorry. **CAPT Neubauer:** Riding gang workers on El Faro. Can you repeat the question Commander? CDR Odom: Yes. So there were 5 Polish maintenance workers on board and for nonmariner crews on board vessels who routinely ride, is there any policy or regulation that requires any type of basic off shore survival training for those riders? **WIT:** The common term is they're referred to as riding gang. And off the top of my head I have not looked into that. I have not dealt with that requirement in quite some

Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

- time, so I have not and I have not refreshed my memory on the requirements there.
- 2 So I can't say with any certainty.
- 3 **CDR Odom:** Thank you. Turn it over to you Captain.
- 4 **CAPT Neubauer:** Captain, could you have your staff provide some background on that
- 5 issue to the board?
- 6 **WIT:** Absolutely.
- 7 **CAPT Neubauer:** Thank you, sir. Are you ready for a break Captain?
- 8 **WIT:** No I'm good.
- 9 **CAPT Neubauer:** Okay.
- 10 **WIT:** I mean unless if you guys want a break. I'm okay.
- 11 **CAPT Neubauer:** Let's take the hearing will recess and reconvene at 4:25.
- 12 The hearing recessed at 1613, 22 February 2016
- The hearing was called to order at 1626, 22 February 2016
- 14 **CAPT Neubauer:** The hearing is now back in session. Captain McAvoy, I want to talk
- a little bit now about the importance of the field in relation to the ACP program. And first
- of all who's the primary authority in the field for enforcing ACP compliance? The Coast
- 17 Guard commands.
- 18 **WIT:** The OCMI. Wait.
- 19 **CAPT Neubauer:** That was my question. Who is primarily has the responsibilities for
- 20 vessel U.S. vessel compliance and inspections?
- 21 **WIT:** The OCMI.
- 22 **CAPT Neubauer:** Does the OCMI have the authority to prevent a U.S. vessel from
- sailing?

WIT: Yes. 1 CAPT Neubauer: Are there times around the Coast Guard when that decision has to 2 3 be made quickly with significant commercial pressures being applied? 4 WIT: Yes. 5 CAPT Neubauer: Would you say that OCMI's make critical life safety decisions? WIT: Yes. 6 7 **CAPT Neubauer:** Can you describe qualifications that you would expect an OCMI to 8 have? And also a time and experience that you would expect. 9 WIT: Can I ask a clarifying question? So you're referring to a specific individual or a 10 staff? 11 **CAPT Neubauer:** I'm referring to a primary OCMI in the field who is actually the 12 decision maker for allowing a vessel to sail for instance. What kind of experience would 13 you expect – would you expect that OCMI to have from a marine safety stand point? Or 14 would you have any expectations? 15 WIT: I think I'm struggling with the question because the authority of the OCMI in most cases rests with the Sector Commander. Under that authority that individual will have a 16 17 staff. And within that staff you're going to have a distribution of qualifications and skills 18 that have to be utilized when those situations as you refer, you know need for a safety 19 type of decision when there's economic – potentially economic pressure. So the OCMI 20 themselves as the authority is going to be utilizing other people's talents as well. It's not 21 like it's a decision that's going to be made in isolation 99 times out of 100.

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CAPT Neubauer: Can you anticipate a situation where that decision would have to be

made in isolation? And I mean, I'll give a scenario. The primary OCMI with the

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authority is at his house at 0200 and receives a call on the vessel that wants to depart immediately but has known safety deficiencies from the marine inspector. Are there time when that OCMI will not have time to do a consultation with prevention and professional? In your opinion, sir.

WIT: I don't think that with today's technology, no. And sir, I appreciate the question I do. But with today's technology and today's – I don't see many of those situations happening that rapidly. So if this was the case of an ACP vessel coming to the OCMI for deferral there should be a recommendation within the ACP societies line of thinking to the OCMI if it was controversial. If it came to the OCMI themselves, you know 0200 in the morning with such intense pressure that that OCMI felt the need to answer that without consulting with staff, I think today's society of concern the OCMI may say no you're not sailing until I have the chance to talk to somebody that knows. I don't know how many OCMI's would actually go out and make that decision if they didn't have a level of comfort or experience to go there. So my question in asking, you know what do you mean by the OCMI is that yes the authority does reside with an individual. But under that authority you have layers of folks that have more experience potentially. So I'm assuming you're referring to perhaps a Sector with the OCMI might be an aviator or it might be a lawyer and has no inspection experience.

CAPT Neubauer: Yes, sir.

WIT: Those folks usually do surround themselves with, or try to surround themselves with people with skills to help advise that individual.

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CAPT Neubauer: Yes, sir. Before I show a study that was done by our travel inspection staff I would like to go back to prior to 9/11 under the marine safety office construct, are you familiar with that, sir? WIT: Yes. CAPT Neubauer: Under that construct was there ever a time the Commanding Officer of the marine safety office or – and his Executive Officer were not marine safety professionals? WIT: So pre-sectorization we have what was called marine safety offices. And in those cases the CO and the XO gained their skill sets and qualifications through the marine safety program. And it would have skills there. So I think I would like to highlight is that the conversation, looking at those two differences, the marine safety office scenario where you have a marine safety type as a CO and XO making a decision versus a nonmarine safety type as the OCMI at a Sector making a decision, they're two different styles of conversation. Granted the one at the marine safety office was much easier because the person in charge, the CO knew and understood at a different level of magnitude what the issues were and meant. And often times, you were talking about O-6's that had been in the business for 25, 26, 27 years. So they had seen a lot of the different things and experienced a lot of the different probations to – the way it could go and needs to be done. **CAPT Neubauer:** But, sir, would you agree that it's important for the actual decision maker to have that level, deep level of understanding?

- WIT: I would agree that the ultimate decision the ultimate decision maker and the
- 2 person with the authority needs to have an adequate level of understanding of the
- 3 issues.
- 4 **CAPT Neubauer:** So in Sectors that do not have a prevention professional as the
- 5 Commanding Officer, or Sector Commander, can you describe how often they can
- 6 delegate OCMI authority?
- 7 **WIT:** There is in the C.F.R's, and I think it's in 46, I think it's in Part II, 46 C.F.R. Part II,
- there is the, I would have to check. There is the ability to delegate a signature, a by
- 9 directional signature authority to a member of staff below the actual OCMI. But that is
- different than that individual delegating the full authority of the position. For example, if
- the OCMI itself was delegated down to a Chief of Prevention, should an appeal situation
- occur that Chief of Prevention wouldn't even need to consult, technically speaking with
- the Sector Commander prior to making his or her decision and either granting the
- appeal or denying the appeal and recommending that it be forwarded to District. So
- that's an example of how the authority is different than the by directional signature.
- 16 **CAPT Neubauer:** How many times can the OCMI authority be delegated down to
- 17 people?
- 18 **WIT:** The signature authority?
- 19 **CAPT Neubauer:** The actual yes, sir.
- 20 **WIT:** I believe once. But I would have to verify that in the regs.
- 21 **CAPT Neubauer:** Yes, sir. Now I would like to call your attention to MBI Exhibit 090,
- 22 page 1.
- 23 WIT: Okay.

CAPT Neubauer: This exhibit is also displayed on the screen. This exhibit is a report compiled by the Coast Guard Headquarters traveling inspection staff. It summarizes the Coast Guard billets in place in prevention field units around the Coast Guard. The header on this document shows the position titles and then there's the number of positions and then a block call M Officer which stands for Marine Safety Officer with that background. The next column is non-marine safety officer and then vacant. I have highlighted the two lines for the 33 Coast Guard Sectors that handle prevention missions. There are also two Sectors that have no prevention duties and not included here. And then there are two Air Stations Sectors that were not added. Overall there are 33 prevention Sector Commander positions left. And of those 9 Sector Commanders have the marine safety officer quals. There are also 33 Deputy Sector Commanders at those units and of those 18 marine safety officer, or 18 of the Deputies have the marine safety officer quals. Captain, do you think it's important for at least one member of the Sector, command cadre to have a marine safety background at a prevention unit?

WIT: Yes.

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CAPT Neubauer: As I read this about 35 percent of Sectors where the primary OCMI decision maker actually has at least a basic level of marine safety experience, do you agree with that, sir? 9 out of 33. Approximately 35 percent. This would be the primary

WIT: But, I'm sorry. I thought you say, Captain Neubauer that command cadre is the qualifier. And if you do that I would add this to 27. I would say 18 and 9.

1 **CAPT Neubauer:** Yes, sir. I'll clarify. For the primary – for the Sector Commander 2 who maintains the primary OCMI authority at all times at the unit. I was saying of those, 3 primary OCMI holders 9 were marine safety professionals, or 35 percent approximately. 4 And then to your point Captain, between the 2 the Sector Commander and Deputy, the 5 command cadre together have at about 80 percent of Sectors have at least some 6 marine safety background at the unit for the command cadre. Would you agree with 7 those numbers roughly? WIT: Sure. 8 **CAPT Neubauer:** Does it concern you that 20 percent of our Coast Guard Sectors in 9 the field do not have a marine safety prevention officer as one of the command cadre? 10 WIT: Yes. 11 CAPT Neubauer: Do you know what drives these types of assignments Captain? Do 12 you know, do we have – do you have any input to say that marine safety professionals 13 14 should be at Sectors during the assignment cycles? 15 **WIT:** At the command cadre level, no. **CAPT Neubauer:** Yes, sir, at the field level. 16 **WIT:** For a Sector command cadre level no. 17 **CAPT Neubauer:** And for the record I want to show that this – these number were in 18 place in October 2015 at the time of the incident. And also for the record that Sector 19 20 Jacksonville and Sector San Juan are two units that did not have a marine safety officer 21 Sector Commander with the primary OCMI responsibility. WIT: But I think it's important to think about a Sector construct and the development of 22 23 a Sector construct separate from – as it evolved from the marine safety office. So you

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know the senior decision makers at the time when it became time for the Coast Guard to restructure I'm assuming had these dialogues, I was very junior then or I don't remember. But I think you've also seen ebbs and flows within the last five years as to the M qualifications of Sector Commanders and then even when you look at our assignment process and the assignment officers making decisions for Sector Commanders and fleeting up Deputies into the Sector Command position, I think of a few units where the Deputy was a marine safety professional for two years then fleeted into the Sector Command position for an additional two years. I think it's probably important to take that into consideration as well. So Sectors are not MSO's. And I'm not really – I don't think it's my position to say which is better because there's advantages and disadvantages to both. **CAPT Neubauer:** Yes, sir. I was just referring to OCMI authority specifically. WIT: Okay. **CAPT Neubauer:** And after the Sector consolidation, how many different authorities does the Sector Commander now have? Or can you name some of the primary authorities? WIT: Officer in Charge Marine Inspection, Captain of the port, I think they might be the SAR mission coordinator, Federal on scene coordinator, actually SAR mission coordinator I don't know if that gets delegated down or not. There's four that I can think of. I think there's 7 total. CAPT Neubauer: So after consolidation they took the MSO authorities and the old group authorities and combined them into one person, is that a fair statement?

- WIT: Roughly that's my understanding. And I think even with some of those group
- authorities if I recall correctly, this is, this might be a little foggy in my memory, some of
- the group authorities stayed at the deputy position, some may have gone to the Sector
- 4 Commander position. Depending on how the makeup of the Sector was when they did
- 5 the OFACO, which is the operating facility authorized change or something like that.
- 6 **CAPT Neubauer:** Yes, sir. Thank you Captain. At this time I'm going to pass the
- 7 questions to Mr. Roth-Roffy. I'm sorry, Mr. Brian Young.
- 8 **Mr. Young:** Thank you Captain. I would like to follow up with some questions
- 9 concerning the targeting list.
- 10 **WIT:** Sure.
- 11 **Mr. Young:** How long before the October 1st release date was the matrix completed
- that included the El Faro?
- WIT: I don't know specifically. I would pulling the data and running spinning the
- cube as the slang goes, probably takes a couple of days for maybe within a couple of
- weeks, a week.
- Mr. Young: Can vessels be added to this list at any time or is it only at the beginning of
- 17 fiscal year for October?
- WIT: One of the input mechanisms is if an OCMI or OCMI staff can provide a
- 19 recommendation for adding a vessel to the list. But they'll do that through the standard
- 20 Coast Guard memo document that we refer to as a standard Coast Guard memo that
- would have to justify to my office why they believe the vessel should be on it.
- Mr. Young: And that list could be updated at any time then?

1 **WIT:** Right. But generally we try to put it out once in October to give some time for 2 those periodic reexams to occur. If we're theoretically updating the message everyday 3 there's no time for the periodic reexam to develop and take place. 4 Mr. Young: Are the authorized classification societies notified that these certain 5 vessels are on the list? WIT: No. 6 7 Mr. Young: No. So there's no expectation from the Coast Guard for the ACS to 8 conduct additional oversight exams because they wouldn't know about it, is that 9 correct? 10 WIT: They know of the process, but they don't know – it's not a released list. So once a unit, however, they would be put in instructions, if a unit sees a vessel from the list 11 12 supply a notice of arrival to their port they are free to call the authorized classification 13 society, the ACP classification society, hey we're going on board why don't you join us. 14 Or you know there's dialogue that will happen at the local level. 15 Mr. Young: And what are the major factors involved in determining whether a vessel makes the targeting list? 16 WIT: So there's a couple different things that happen. So as I mentioned earlier the 17 18 relationship in 2012 that we reestablished after losing the LORAX positon, 19 reestablishing the relationship with the authorized classification societies, we got in a 20 more routine basis to get the data of outstanding commissions of class, any nonconformities noted during ISM exams, expired certificates and what not. So we were in 21 22 a little more of a routine feedback loop from the ACP class societies. All of that stuff 23 gets into – is pulled in and called into our system and then we also guery our database.

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our MISLE system to look for operational controls, port state control detentions, things like that. And we also enter data from MISLE that might include age of the vessel. It might include some outstanding deficiencies. A lot of that is put into cube and spun up and there's a protocol that we have developed that we use to do this which is an in house tool. And we print the list out. Mr. Young: Thank you. Changing gears a little bit to training of inspectors and surveyors. Does the Coast Guard have a process that validates the qualifications and the training of the ACS surveyors? WIT: So verifying that each ACP society has an adequate training program is part of the regional and or Headquarters types of audit. Usually it's an element within the audit either in a corporate or regional or a local audit site for the ACS. That is a topic of discussion that could come up. Additionally since 2013 time frame, me – my staff and I have also tried to improve on the discussions with ACP class society policy makers and the principal surveyors recognizing that there's a collaborative nature of understanding each other's business, one to help the training and cross-training and two so that we can better do oversight when we need to. So through those – those dialogues have also been taking place since about 2013. Mr. Young: And speaking of training on inspectors, without a vintage vessel COE, how does the Coast Guard ensure that steam qualified inspectors are in attendance for steam ship inspections? WIT: So an OCMI staff that has a steam inspection that they need a qualified steam inspector for you should know whether or not they have one on staff, if they don't they have to go and either request a traveling marine inspector that may have it. There are

- 1 still members in the Coast Guard that have the qualification. One of - there was a 2 program that we used in the Great Lakes every spring, I do not know off the top of my 3 head if we're running it this spring where it was a concentrated inspection training on 4 the job type of situation that was initially set up by the vintage vessel NCOE to get 5 marine inspectors from across the country that needed to see steam drums, that 6 needed to see system work and being brought up, put online. And that was at place 7 where a marine inspector could go, get a couple weeks of concentrated work on that qualification. And usually at the end of that training regime a verification board, which is 8 9 what we use to say if a member's qualified or not as they interview the member and 10 sign off on that member's skills, a verification board would be available to sign off the quals on those that were – that passed. That were qualified at that point. 11
- Mr. Young: And do you know the percentage of ships that are enrolled in the ACP program that are actually steam plants?
- 14 **WIT:** I do not.
- Mr. Young: And how extensive is the traveling marine inspection pool if you will? How many traveling inspectors are there that are steam qualified?
- 17 **WIT:** I know at least two and the does not ---
- 18 **CAPT Neubauer:** For the record Lieutenant Commander Venturella, do you know that 19 number? I'm sorry, Commander Odom do you know that number?
- 20 **CDR Odom:** Currently two is correct.
- 21 **Mr. Young:** Thank you.
- WIT: That's just the Chief and the civilian?
- 23 CDR Odom: It would be myself and Mark

- 1 **WIT:** What about Captain Fern?
- 2 **CDR Odom:** Captain Flaherty [sic] is qualified, but not current.
- 3 **Mr. Young:** So the traveling inspector would be called in if the local Sector did not have
- 4 a steam qualified?
- 5 **WIT:** That would be on option. If there's a qualified steam inspector at a neighboring
- 6 port, someone could come over. Let's say someone is in New Orleans they might be
- 7 able to drive over to Jacksonville or Mobile or Houston.
- 8 Mr. Young: How is documented that the results of an ACP exam had been reviewed
- 9 by the Coast Guard prior to the oversight exam?
- 10 **WIT:** Can you do that again?
- Mr. Young: In preparation to do an oversight exam of a vessel that has been surveyed
- by an ACS, how is it captured and documented that the inspectors have actually
- reviewed the entire inspection process prior going to the ship?
- 14 WIT: So how do we verify that the Coast Guard marine inspector has reviewed the
- 15 history?
- Mr. Young: Of the ACS inspection that has already taken place.
- WIT: I don't know if we have a tool or a requirement to document that.
- Mr. Young: And what percent of the time does the Coast Guard and ACS perform joint
- inspections on ships?
- 20 **WIT:** Going back to your last question. Within our checklist books that we do
- inspections with, we call them 840 books because that's the form number, there's
- 22 probably a block, I would have to go verify that the inspector will check off to say he has

1 done his due diligence and homework as preparatory in advance of the actual 2 inspection. 3 Mr. Young: Thank you. What percent of time does the Coast Guard and an ACS 4 perform a joint inspection? 5 **WIT:** It's not mandated at any specific time. It's not – neither is it prohibited at any 6 specific time. 7 Mr. Young: And to your knowledge were there ever any joint inspections of El Faro in 8 the last year or so? 9 WIT: I don't know. 10 Mr. Young: And my last question. Could you please describe the difference in the inspection of an ACP vessel as opposed to a U.S. flagged vessel that is not enrolled in 11 that program? What is the stringency of the inspection? 12 13 WIT: So if a non-ACP U.S. flagged deep draft vessel, the Coast Guard marine 14 inspector is responsible to verify all the equipment, all the structural integrity and 15 compliance with all the operational rules that they need to verify. In other words structurally is the vessel sound. They have to go through – it's due for internals, internal 16 survey which is once in a cycle program. They have to verify the equipment and some 17 of this may be done with a class surveyor, because even though a vessel is not in ACP 18 19 it will still be classed. So classification society's surveyors will be on to do various 20 things anyway. But the Coast Guard marine inspectors more responsible for the details

of the inspection as opposed to an ACP exam. Again the marine inspector to do the

operational stuff like the fire and the boat drill, the deck walk and they can spot check or

go into you know a sampling type of program to verify things. So in a nutshell the ACP

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Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

- exam is less time consuming and strenuous to the Coast Guard marine inspector
- because he's relying on work that the classification society surveyor has already done.
- 3 **Mr. Young:** Understood. And with all that being said of an ACP vessel, which agency
- 4 would be responsible for conducting an oversight of the automation test procedure?
- 5 Speaking of, say specifically boiler shut downs, over speed trips on generators and
- turbines, who would be verifying that those test had been complete and functionally
- 7 processed?
- 8 **WIT:** I would have to go back and look. It's not an area I have been deep in for some
- 9 time. And with automation it can get, if I recall correctly can get a little complicated
- because there are some things that may be in the supplement and or the regs. The
- supplement that aren't as detailed in the class rules. So it is an area of focus, special
- attention should be paid to, but I don't know off the top of my head, if there are things
- that the Coast Guard has to look at that that class does not.
- 14 **Mr. Young:** Thank you.
- 15 **CAPT Neubauer:** Mr. Roth-Roffy.
- 16 **Mr. Roth-Roffy:** Thank you Captain. Good afternoon.
- 17 **WIT:** Good afternoon.
- 18 **Mr. Roth-Roffy:** Tom Roth-Roffy, NTSB. Sir, has the –CVC, your office done any
- 19 evaluations of special risks to marine safety that might be chased by older vessels as
- 20 opposed to newer vessels?
- WIT: I don't think, I cannot recall if we have done any specific studies with age as sole
- criteria influencing risk.

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Mr. Roth-Roffy: Sir, do you have any professional opinion about the facts of an aging on its ability to operate safely as opposed to a newer vessel? WIT: I think it's going to vary, there's going to be some case by case there. So in commercially traded vessels as a vessel ages there's certain economic decisions that have to go into the mix, a business decision if you will. As to how much money you put into a vessel to maintain it in a compliance – to maintain it for compliance with the minimum rules and regulations. Age in and of itself, look at Coast Guard Cutter Eagle, I mean she's still a sailing vessel, so if money and decisions and maintenance are put into a vessel it could last for quite some time. I mean even at the Great Lakes you still have some very old vessels in the Great Lakes. So there's a lot of variables that go into those decisions and a lot of them are business decisions as to what is my - how much money do I have to put into vessel to maintain it in compliance with the minimum rules and regulations. So it's not an easy question to answer on age alone. Mr. Roth-Roffy: Thank you sir, for that attempt. Captain Neubauer had a discussion about the disbandment of the vintage vessel NCOE, NCOI, do you have an understanding of why that particular NCOI was, NCOE, I apologize, was disbanded? WIT: I don't know. I think – I think it just suffered due to budget cuts that Coast Guard faced. I don't have the details. Mr. Roth-Roffy: Sir, in your opinion is there still need for that particular center of expertise? **WIT:** There's still a need for Coast Guard marine inspectors to understand steam. There's occasionally a need for Coast Guard marine inspectors to understand rivets and older systems on vessels. Um, I can think of even a ship that's a very important ship in

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the – that is in combination of rivets and weld. So there's a need to have those skills within an element of staff in our marine inspection forces. Mr. Roth-Roffy: Sir, I believe you made a statement that you're struggling to maintain an advance in technical proficiencies of your inspectors. Do you have a plan to address the deficiency that you apparently identified to meet this deficiency in technical proficiencies of inspectors in the Coast Guard? WIT: We do. We in 2013, or maybe 2014 I hired an individual on staff to basically work with all, I mentioned the marine inspection training officers, the MITOs, I hired an individual at the Headquarters level to start to collaborate with all the MITOs at various Sectors and start to work on harmonizing our policies to – and to conduct some risk analysis to say where are our biggest areas that we need to focus on. And how do we get those issues in front of the marine inspectors and how do we train those inspectors to understand and be able to identify and make recommendations on how to get them in a safer mode in compliance with rules and regulations. That however does take some time and it takes some effort from boundaries other than within my office. We have a command in the Coast Guard who focuses on training expertise and so there's a lot of collaboration that we would have to do, and do have to do with our folks in that training command who help supply training to Coast Guard marine inspectors. And that command helps supply training to folks throughout the enterprise of the United States Coast Guard. Mr. Roth-Roffy: Sir, there are a relatively small number of U.S. flagged vessels operating, the vast majority of vessels calling our ports are foreign flagged vessels. Could you compare the level oversight of inspections performed by U.S. Coast Guard

inspectors on foreign flagged vessels relative to U.S. flagged vessels and role with the ACP?

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WIT: So at the first level a port state control examination by a port state examiner, or a port state control officer may be very similar looking in magnitude and depth. May be very similar looking to what a – one might expect from a marine inspector doing an ACP oversight exam. In fact the literature, the Commandant policy in the marine safety manual speaks to this and says okay, on an ACP oversight annual exam the expectation is this, we'll have an approach similar to what a port state control officer may do on a foreign flagged vessel. But that's on the surface. Then as things, if things are not well on the surface or there's a need for an expanded exam on either U.S. or foreign the authorities and methodologies which govern how they're dealt with vary. And the reason why is that on a U.S. flagged vessel ultimately the United States is the flag state and so we have the authority, which has been delegated to the Coast Guard to ensure compliance with the rules and regulations. Where on a foreign flagged vessel we're the last safety net in that structure to check up on things. So if we find a foreign flagged vessel that is in a substandard condition we'll refer that vessel back to, through various tools, back to the IMO potentially as a – with a formal gig of a, we'll call it port state control detention. That will force that vessel's flagged state surveyors or classification societies who are responsible to ensure compliance into the discussion. So back to the U.S. vessel if we do our annual exam and start to realize the need for an expanded exam that's when we start to bring in the authorized class – the ACP class – the ACP surveyors. Because then it's more of a joint role, ultimately it's a U.S. flagged vessel and it's going to carry a Coast Guard issued certificate of inspection. So on the

- surface very similar, but once you go into expanded exam scenarios the tools and the
- 2 authorities vary.
- 3 **Mr. Roth-Roffy:** Sir, we had a little discussion about the supplement the document
- 4 identified offset between international and class society rules and U.S. regulations. And
- 5 you mentioned that these are periodically reviewed. Do you have any idea of the gaps
- between the U.S. regulations and foreign regulations? Are foreign safety regulations
- 7 coming closer to U.S. regs are there a gap widening, if you can speak to that, sir?
- 8 **WIT:** The specific question was are foreign regs coming closer to U.S. regs?
- 9 Mr. Roth-Roffy: Yes, sir. In particular the SOLAS regulations, safety regulations and
- the classification society rules. Is the supplement document expanding or contracting?
- WIT: I don't know off the top of my head. Although I will mention that it is a topic that
- 12 gets studied. And even back from a 2010, maybe it was a 2014 authorization act there
- was a provision for the Coast Guard to hire a study to look at that issue. Slightly
- different in that it was looked at the competiveness between U.S. ships and their
- regulatory scheme as compared to foreign and their regulatory scheme.
- 16 **Mr. Roth-Roffy:** Thank you, sir. That's all I have.
- 17 **CAPT Neubauer:** Captain McAvoy I just have a few follow up questions and we'll
- recess for a break. We briefly discussed the 2008 marine safety enhancement plan.
- And part of that plan if you remember was a large influx of marine safety billets around
- the Coast Guard, is that accurate, sir?
- 21 **WIT:** Yes, that's accurate.

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CAPT Neubauer: Since that time, since those billets were implemented, can you tell me if the Coast Guard has gained or lost billets over time? For your – I'm specifically referring to inspectors. WIT: I don't know specifically with a net gain or loss. There has been some internal shuffling if you will. My hunch is that we may be down in the net sense, but I don't have those specific numbers. So in other words back in 2008 and the years after I think there was a significant amount of billets that provided to deal with upcoming towing vessel exams. And the development of a subchapter that's going to govern how we inspect towing vessels when that rule becomes - come out. Officers and Petty Officers more specifically were hired to bring that on into fruition some of those billets have been locally reassigned by commands. So it would create the appearance that we have lost marine inspection billets. But in the end they just may have been absorbed into other functions locally. So in net sense I don't know specifically. **CAPT Neubauer:** Captain, are you familiar with the Sector staffing model? WIT: Yes. **CAPT Neubauer:** Does that model tell you the expected number of marine inspectors that you need at each field unit based on workload? WIT: Yes, that's what that intends to be. **CAPT Neubauer:** Do you know if you're – if your inspectors currently meet the anticipated number of inspectors that would be indicated by the model? WIT: So are we showing green in all of our Sectors per that model, is that what you're asking?

- 1 **CAPT Neubauer:** Can you give me an estimate of how many inspectors, either we
- 2 have more than the model shows or less overall throughout the Coast Guard?
- WIT: I think that we're doing some studies on that model as well as some other. So the
- 4 position that I hired which we call the marine inspec the MITO to deal with the policy
- 5 nationally is also working on some numbers and comparison studies to say what is the
- strength of our inspection forces out there as far as compared to PAL and the Sector
- staffing model. And I think that we're not at 100 percent.
- 8 **CAPT Neubauer**: The ----
- 9 **WIT:** And I think it's going to vary by District as to where we are below 100 percent.
- 10 **CAPT Neubauer:** So overall in the Coast Guard per your analysis by the trainee, or by
- the new position you hired, we're fulfilling 100 percent of the workload, the anticipated
- workload with inspectors?
- 13 **WIT:** Can you say that again?
- 14 **CAPT Neubauer:** Did you say that per the model that you're following that your billets
- are 100 percent filled?
- WIT: No, no, no. We are not at 100 percent. We're short.
- 17 **CAPT Neubauer:** Can you give me an approximate number using the Sector staffing
- 18 model?
- 19 **WIT:** I think it's going to vary by District.
- 20 **CAPT Neubauer:** But I mean can you give me a total number of inspectors that would
- be short throughout the Coast Guard?
- WIT: I don't know off the top of my head.
- 23 **CAPT Neubauer:** At this time we'll take a 10 minute recess and reconvene at 5:25.

The hearing recessed at 1714, 22 February 2016

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The hearing was called to order at 1724, 22 February 2016

CAPT Neubauer: The hearing is now back in session. I have two clarifications to make. The first is the percentage of Sector Commanders that are marine safety officers. It's 9 out of 33 or 27 percent, not 35 percent. And then also it was stated that there are two traveling inspectors with steam qual inspections, there are actually two that deploy and do those missions in the field, there are a total of 6 traveling inspectors that have the steam qualification. But two conduct the mission. Captain McAvoy I have a follow up question on resources, our inspectors in the field. And you mentioned that there was a gap. Have you ever attempted, or recently attempted to address that gap with a resource proposal to Headquarters? WIT: Yes. So, thanks Captain Neubauer I was actually – see if I could correct a little bit of my answer and bring this example up. So as the Coast Guard recognizes and looks forward and looks at the need and demand for marine inspectors there's a lot of factors that go into the discussion and a couple years ago, maybe two years ago recognizing how the country is shifting – we're, you know now starting to become an energy export nation versus an import nation. There was a lot of activity around new ships and ship building dealing with what we call the energy renaissance. As we started to look at the expectation of how many marine inspectors we would need to accommodate the increase in ships calling on the United States, the increased barges that were going to be built to bring, you know gas, shell gas, whatever down river to an export terminal or to a processing facility. You know some estimates were made as to how many resources we would need to do that. Within that study we also looked at back to the

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- 2008 time frame that you had mentioned. How many resources do we still have on
- book? Where did they potentially go? We tried to roll all of that into an aspect of how
- many more marine inspectors we would need and it was submitted as a resource
- 4 proposal a couple years ago. Now the marine inspector leg of that resource proposal
- 5 was just one leg of it. It also included billets that were not necessarily marine
- 6 inspectors.
- 7 **CAPT Neubauer:** Do you remember how many inspectors you asked for, sir?
- 8 Approximately.
- 9 **WIT:** I think it was 300ish.
- 10 **CAPT Neubauer:** 300. And how many inspectors would you estimate you have now in
- 11 the field?
- 12 **WIT:** I should know that number but I don't. I don't.
- 13 **CAPT Neubauer:** Is it around, or do you have an estimate?
- WIT: No. I'd be, it would be a guess and I don't want to risk getting off by a number
- magnitude.
- 16 **CAPT Neubauer:** At this time we'll go to the parties in interest. Tote do you have any
- 17 questions?
- 18 **Tote Inc:** No questions, sir.
- 19 **CAPT Neubauer:** ABS do you have any questions?
- 20 ABS: Yes, Captain we do. Good afternoon Captain. My name is Jerry White I
- 21 represent ABS. We discussed earlier this afternoon an element of communications or
- 22 liaison through ABS and the Coast Guard. And I was wondering with regard to ABS

notifications under the ACP program with regard specific attendances on vessels, can vou describe how the Coast Guard determines whether or not it too will attend?

WIT: For a targeted periodic reexam or just in general?

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ABS: In general. Whenever ABS is going to go aboard for a survey or whether that's an annual hull or machinery or a damage survey, what determines Coast Guard attendance?

WIT: So there's a couple different things that could go into that discussion. First and foremost there is a dialogue that would occur at the local level between the Marine Inspection shop and the surveyors, the regional surveyors or dealing with the fleet in whatever port it is. There's requirement for that communication and there's notification requirements as to hey we're going on board and ACP vessel to do this survey or that survey. Sometimes it's email, sometimes it's a phone call. I think each port is going to set up their dialogue on their own. So through that dialogue the marine inspect – the Coast Guard marine inspectors will know of, you know ABS going down doing an inspection. And depending on the specific needs at the time within that office it may be a vessel that the Coast Guard's concerned about due to past history, due to ongoing things that you know have come up in conversation at the time. There may be a need for some training. You know perhaps it's the Coast Guard marine inspector saying I've got a couple guys that would love to see that type of test on the systems being tested. Do you mind if we show up or just show up. So generally at the port level something we've been pushing for, for the last couple of years is better communications amongst the surveyors and the marine inspectors.

1 ABS: Would you know of sitting here today how many times the Coast Guard did in 2 fact attend the El Faro within the last say 18 months? 3 WIT: No. 4 **ABS:** Would there someone – would there be someone within your command that 5 would know that number? WIT: Yeah, actually there's annual surveys that were done, let me back up. Coast 6 7 Guard attend in conjunction with class or Coast Guard attend without – either with or without class? 8 9 **ABS:** Either way. 10 WIT: Per my review of the El Faro's record I know the Coast Guard did an annual in March of 2015. I know they were on in October of 2014 and I believe, that's as far back 11 12 as I can remember. But that was just looking at the pullouts from our MISLE data 13 system. 14 CAPT Neubauer: Mr. White I also want to make a note on the record that the second 15 round of hearing we will talking or taking testimony from Coast Guard and ABS marine surveyors. And at that time they can give you a detailed assessment of the most 16 frequent inspections and who attended. 17 ABS: Thank you. With regard to the MISLE system, does the MISLE system, I 18 19 understand – I understood to be a risk based system, is that correct? 20 WIT: Not exact, no, sir. So MISLE is the marine information safety and law

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enforcement, I think that's the acronym. It's a database that we use to document all of

our activities, inspections, examinations, and what not. So it's not, data is entered in,

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- it's not if you wanted to make a risk based decision on data in MISLE you would have
- to pull that data out and then massage it for certain criteria.
- 3 ABS: Would the MISLE system on the Coast Guard keep track of any non-conformities
- 4 or major non-conformities that were in existence for the El Faro on its last voyage?
- 5 **WIT:** Yes I believe so. So in a couple of years ago we updated out Commandant
- 6 guidance to ensure better integrity of all deficiencies being entered into the MISLE
- 7 system. Where I'm struggling is how that would include classification society data. But
- 8 I believe we accounted for ensuring that gets into the system.
- 9 **ABS:** For the El Faro are you aware of any non-conformities or major non-conformities
- in existence at the time of its last voyage?
- 11 **WIT:** I am not aware.
- 12 **ABS:** Is that ----
- 13 **CAPT Neubauer:** Can you say that over, sir?
- 14 **WIT:** I'm sorry.
- 15 **CAPT Neubauer:** I didn't hear the response.
- WIT: I'm not aware of any major non-conformities or non-conformities on the El Faro
- 17 prior to her last voyage.
- 18 **ABS:** You're not aware or there were none?
- 19 **WIT:** I'm not aware of any. I can't say there were none, I don't know.
- ABS: And as far as communication does CDC1 receive daily notifications of
- 21 outstanding recommendations or outstanding deficiencies, overdue inspections, or class
- suspensions on a daily basis?
- 23 **WIT:** If not daily near daily.

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ABS: And as far as the target list that you mentioned was published or released by the Coast Guard after the casualty, can you tell us why the El Faro was on the ACP target list? WIT: Yes. So one of the criteria that goes into generating that target list deals with what we call a reportable marine casualties. My understanding is that there were some reportable marine casualties with a mariner's health, might have been a heart attack. And then that might have been, it was either one two situations like that, I can't recall the specifics, but because of those reportable marine casualties occurring that triggered an assigned of a point or two within the, you know the spinning number of the cube that put El Faro into the – onto the list. ABS: So an inclusion basically – is it your understanding that the inclusion of the El Faro on the target list that we published after the casualty was not due to any structural or machinery related item for the vessel? **WIT:** I don't know if that's a fair way to say that. On the surface I think you're correct. But there's – to cross the threshold of making it onto the list there's other factors that build and cumulate points in other categories. So to be that close to the threshold and then have a reportable marine casualty puts you over the threshold, I think that's slightly different than saying there are none. **ABS:** Okay. But is it your understanding that the reason she was on the list, the reason that El Faro was on the list was due to that health emergency you described? WIT: The reason why she crossed the threshold of making the list was because of the points assigned due to that heart attack.

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ABS: You further testified with regard to Coast Guard oversight under the governing manual and you described for us the steps taken by the Coast Guard in connection with the certificate of inspection, the annual examinations, the periodic oversight reexaminations and attendance by the Coast Guard at dry dock, internal structural exams and cargo tank internal examinations, is that correct? Is that an oversight that the Coast Guard exercised under the NVIC for the El Faro? Do you want me to break that down, sir? WIT: Yeah, that would be great. ABS: Under the NVIC I understood your testimony to include an explanation as to specific oversight. You included certification of inspection, and I understood that to include a specific review of documents by the Coast Guard and it exercised or drilling of the crew on some safety aspect of the vessel, maybe abandoned ship drills, is that correct? WIT: So those are elements to an oversight process. So when we are doing an annual exam for certification of inspection. Some of those elements are included. For example fire and boat drill, abandoned ship drill. Other examples of oversight would include attendance at internal structural surveying. So I think the point I was trying to make is there's a lot of different opportunities for an element of oversight to be acted upon by the U.S. Coast Guard. **ABS:** And I guess with the El Faro was that oversight exercised? **WIT:** So my office we generate the national policy, but unlike the marine safety center which is a little more directly involved in the specific cases. You know there's a certain

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- element of us relying on the OCMI to carry out the next element of their duties to carry
- 2 out that specific oversight. So the answer to your question is I don't know.
- 3 **CAPT Neubauer:** Mr. White I believe that we can address that at the second session
- 4 also when we talk to the inspectors.
- 5 **ABS:** Okay, thank you. I have no further questions, thank you Captain McAvoy.
- 6 **WIT:** You're welcome, sir.
- 7 **CAPT Neubauer:** Mrs. Davidson do you have any questions?
- 8 **Ms. Davidson:** No further questions.
- 9 **CAPT Neubauer:** HEC do you have any questions?
- 10 **HEC:** No questions.
- 11 **CAPT Neubauer:** Captain McAvoy, another important aspect to ACP oversight and all
- of the other safety program oversights that you have, is the Headquarters staff over the
- last several years, have you had a staff increase or decrease? Can you ----
- 14 **WIT:** Decrease.
- 15 **CAPT Neubauer:** Can you give a, you said decrease, can you give an approximate
- 16 percentage?
- WIT: Um I've lost 2 billets over the last, well since 2012, I think since 2012 I've lost 3
- billets over a staff maybe 35. I don't have the full numbers. One of those key billets
- was the LORAX position itself. Which was in 2012 the LORAX was reassigned from
- Houston to Headquarters, excuse me, 2010 it was reassigned from Houston to
- Headquarters. And then in 2012 it was not refilled the position was cut.
- 22 **CAPT Neubauer:** Thank you Captain.

1 WIT: Separate – earlier testimony with Captain Mauger you guys asked about the ACP

- fleet size, I have that if you still need it.
- 3 **CAPT Neubauer:** Yes, sir. Thank you. Can you give the number?
- WIT: Oh sure. As of today there's 402 ACP vessels in the ACP program. Breaking
- 5 that down a little bit 187 of those are OSV's, off shore supply vessels, 203 are deep
- draft trading vessels, and 12 tugs. And I just wanted to point out that of the 203 deep
- 7 draft when you take United States Naval Ships or Military Sealift Command ships out of
- 8 that mix, you're left with about 96 typical commercial trading private industry vessels.
- 9 **CAPT Neubauer:** Thank you Captain. We're now going to go into a line of guestioning
- in regards to ACP compliance for safety management systems.
- 11 **WIT:** Okay.

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- 12 **CAPT Neubauer:** Commander Odom.
- 13 **CDR Odom:** Captain. I just have a few questions specific to the safety management
- system as it relates to the El Faro and Tote Services. Is there currently, there's two
- documents in the system, one is the document compliance which is specific to the
- 16 company and one is the safety management certificate which is specific to the vessel.
- 17 Can you just quickly tell us what's the Coast Guard's role in issuing those certificates?
- WIT: So the safety management certificate issued to a vessel verifies compliance with
- the ISM code, oh they both verify compliance with the ISM code. The Coast Guard as a
- 20 representative of the flag state, or the Coast Guard as the flag state authority has the
- responsibility to ensure that the delegated parties that due the surveys and the audits
- for them have done their jobs and the certificate is valid and we oversee through the
- auditing program those companies that are authorized to issue those documents.

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CDR Odom: For attending the SMC audit or attending the DOC audit for issuing those certificates, is there a specific defined program requires the Coast Guard in any capacity to attend those audits? **WIT:** I would have to check the specifics. **CDR Odom:** Looking back through the record where the Coast Guard attendance has been documented for compliance audit which is specific to code as a company and looking at the attendance by code - Coast Guard marine inspectors for oversight of that audit I couldn't find any record of a Coast Guard member ever attending an audit for the DOC code. How do we capture that information? How's it captured where the Coast Guard attends DOC audits and is there again any requirement for us to attend those audits for oversight? WIT: As I mentioned, you know I would have to check the specifics that make it a requirement. When the DOC audit or SMC audit is taking place notification is required to be provided to the Coast Guard. Then the Coast Guard has the discretion to decide to attend to observe or not. Loosely my recollection. Again I'm struggling on the requirement to attend language that you refer to. And I would have to check, I would have the document. I would have to check the requirements in the code. CDR Odom: Thank you. One other thing. With the personnel that do attend these audits, when we talk about authorized class society generally their surveyors, if I understand correctly and certainly ABS can correct me if I don't, their surveyors are also trained as auditors and they are the ones that do the DOC audits and also the SMC audits. However, Coast Guard marine inspectors that are sent to observe they're

trained and qualified auditors, are they trained and qualified auditors for the purpose of observing the auditors?

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WIT: Sort of and sometimes yes and sometimes no. So I would like to back up a little bit Mike and I don't know if it's, and maybe it is a definitive statement, but I do not know if every surveyor in either ABS or authorized class societies if every surveyor is in fact also a qualified auditor. It has not always been the case that that was true. In fact I think one of the things that the Coast Guard has discovered over the last couple of years, and IAC's is aware of this and has put out some procedural recommendations to address it, is that often times a surveyor looking at material condition and equipment conditions on board a ship is not recognizing with the auditors on board to check for verification of compliance with their safety and management system, thus leading to compliance with the ISM code. So procedural recommendation number 9 is something that the IMO puts out that addresses the ISM code and governs what audits have to cover and how they all work. Procedural recommendation 17 or PR 17 is a procedure for the surveyor when the surveyor is on the vessel can – if he or she sees things that raise concern about a vessel or a company's lack of compliance with the ISM code they can formally document that. And then the PR 17 are required to be submitted to the Coast Guard, the class society and the Coast Guard and the idea there is to try to link up what the surveyors are seeing with what the audit of the safety management system is supposed to be governing and taken care of. I think that's an area – I think even the RO code or the recognized organization code another IMO document that is going into elements of how this is all done addresses some of this is well, is fairly new, it's fairly new territory for the Coast Guard. And what I mean new, couple of years, I think the

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WIT: I am aware of that.

RO code went into effect in 2015. But the point being that surveyors and auditors have not always been seeing each other's work as clearly as they need to. And steps have been taken to try to bridge that gap so that a surveyor can recognize when a safety management system or compliance with the safety management system is suffering. So that flag administration – and that would have a reporting mechanism so that the flag administration can take step to combat that deficiency and ensure the safety of the program. So that's on the class side. You also asked about marine inspectors. So we do have a very small cadre of folks on staff throughout the Coast Guard that are qualified to go observe IMO style or excuse me, yeah the safety management systems of the audits at either corporate level or on down. And one of the training programs that we have to also build is how to more marine inspectors aware and qualified to be those auditors and get the qualifications necessary. So for me to send an individual over to witness a corporate audit, ISM audit like at Oslo or something like that at DNV there's only a very small handful of folks that are qualified to do that at this point. CDR Odom: Thank you Captain. Just one thing for clarification, does the Coast Guard specifically have a qual called auditor? I know we have the machinery quals, we have hull quals, we have OSV qual, do we have a mechanism for a marine inspector to get a qual within the Coast Guard system? And that's my last question, thank you very much. **WIT:** I don't believe we have – we have required training for the people that are going to do the audit work, but do not believe we have a specific qual named auditor. **CAPT Neubauer:** Captain, I have a follow question on a different topic, its life saving. The El faro had open life boats, are you aware of that, sir?

- 1 **CAPT Neubauer:** Can I turn your attention to Exhibit 24? Before we get into the
- 2 exhibit, does your office have the authority to ensure compliance with life saving
- appliances on U.S. vessels? Do you set the compliance for life saving equipment?
- 4 **WIT:** My office does not write the standards.
- 5 **CAPT Neubauer:** Does your office set the policy for what vessels can carry?
- 6 **WIT:** My office sets the policy of how to inspect what's required to be carried.
- 7 **CAPT Neubauer:** I would like to draw your attention to this marine casualty report
- which is the steam ship marine electric that capsized and sank on 12 February 1983
- 9 with the loss of 31 lives. And I would like to turn to page 7.
- 10 WIT: Okay.
- 11 **CAPT Neubauer:** Actually, correction page 11.
- WIT: You're talking the red numbers now right, not the actual report?
- 13 **CAPT Neubauer:** I am. Exhibit 24, page 11.
- 14 **WIT**: Okay.
- 15 **CAPT Neubauer:** This is a final action memo that was drafted or signed by the
- 16 Commandant in response to a recommendation for the marine electric sinking that was
- related to life boats and I'm going to read the final action memo Commandant response,
- that recommendations, and that was recommendation 6. This recommendation is
- concurred with. The Coast Guard will propose that inspected cargo and tank vessels in
- ocean and coastwise service, equipped with mechanical davits of any type, be fitted
- with enclosed lifeboats and launching systems that meet SOLAS 74/83 no later than
- July 1st, 1991. This would result in the replacement of quadrantal davits and other
- launching systems without winches by July 1, 1991, five years after SOLAS 74/83 goes

Under 46 U.S. Code §6308, no part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States.

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into force for new constructions. In addition the Coast Guard will propose that all existing inspected cargo and tank vessels on ocean and coastwise voyages, presently equipped with open lifeboats and gravity davits, be fitted with enclosed lifeboats and launching systems that meet SOLAS 74/83 no later than July 1, 2001. Understanding that your office doesn't initiate safety regulations, do you know why that recommendation remains open? Do you have any idea, sir? WIT: So I think that with regard to open lifeboats there was discussion in the 90's about, at the IMO as to whether or not vessels would have to be retro fitted with closed life boats or whether it would be left to new construction vessels after a certain date to have an enclosed lifeboat. There was a series or at least there was a proposed notice of rule making or a notice of proposed rulemaking and a comment period, '94, '96 time frame that got very much into the details of how the open lifeboat issue was being discussed at both the IMO and because it was a no suppose rule making it was the subject of a comment in a Federal rule making project. I believe there were comments on the record from, for the notice of proposal rule making that came from within industry talking about potential competitive disadvantage and the difficulties of putting enclosed lifeboats on to, retro fitting enclosed lifeboats onto currently - onto vessels currently equipped with open lifeboats. Parallel or around that time the conversations at IMO also occurred and I believe the IMO, and I would have to check this decided that they were not going to make a retro fit be required. So we have a difference in a new build versus a retro fit. And I think some of the logic at the time also dealt with, you know not - so earlier I've testified that age is not a factor, but here was a case where they used age to think that most vessels of a certain age would be out of service you know within

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- the next 10 years. The expected life cycle of a vessel was maybe 20 years or 30, I
- don't know, I wasn't there. But from a Naval Architect's point of view early in my
- studies, you know 20 years is always thrown out as the life cycle of a vessel. However,
- 4 just like automobiles they can last longer if taken care of. So because the IMO, my
- 5 understanding is that because the IMO chose not to make the requirement to retro fit to
- 6 covered lifeboats the issue was not pursued further in the Federal rule making project at
- 7 the time.
- 8 **CAPT Neubauer:** Do you know the comparison of average age of a bulk carrier, or a
- 9 cargo vessel in the international fleet versus the age of the vessel in the U.S. fleet?
- 10 Can you give a general description?
- 11 **WIT:** No.
- 12 **CAPT Neubauer:** Is it possible that the IMO decided not to pursue that issue because
- the vessels in the international fleet are newer?
- 14 **WIT:** It could very well be possible, I don't know.
- 15 **CAPT Neubauer:** At this time are there any other questions for Captain McAvoy? Tote
- do you have any questions?
- 17 **Tote Inc:** No questions, sir.
- 18 **CAPT Neubauer:** ABS do you have any questions?
- 19 **ABS:** No questions.
- 20 **CAPT Neubauer:** Mrs. Davidson?
- 21 **Ms. Davidson:** No questions.
- 22 **CAPT Neubauer:** And HEC?
- 23 **HEC:** No questions.

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1 **CAPT Neubauer:** Captain McAvoy, you are now released as a witness at this Marine 2 Board Investigation. Thank you for your testimony and cooperation. If I later determine that this board needs additional information from you I will contact you through your 3 4 counsel. If you have any questions about this investigation you may contact the Marine 5 Board Recorder, Lieutenant Commander Damian Yemma. I want to personally thank you for coming down from Headquarters to provide information to the board, sir. And 6 7 before we break I want to ask do any of the parties in interest have any concerns with 8 the testimony of Captain McAvoy or Captain Mauger, I believe I forgot to ask that 9 earlier. 10 Tote Inc: No, sir. ABS: No, sir. 11 12 **HEC:** No, sir. 13 Ms. Davidson: No, sir. **CAPT Neubauer:** At this time the hearing is adjourned and we'll reconvene at 0900 14 15 tomorrow morning. The hearing adjourned at 1801, 22 February 2016. 16 17 18

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